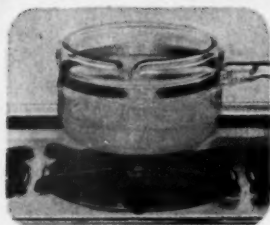


AMERICAN GAS ASSOCIATION

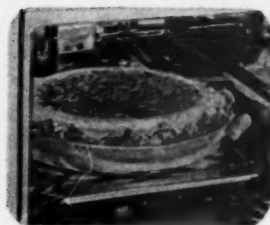


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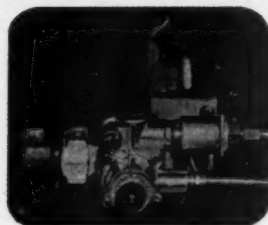
Entertaining or every-day, GAS makes cooking fast, cool and clean on this fabulous new TAPPAN



CONTROLLED—WITH GAS. Burner-with-a-Brain® guards your Hollandaise sauce! Controls cooking temperature so even delicate foods won't scorch, burn, or boil over. Regulates itself automatically.



FLAME-BROWNED—WITH GAS. Even Crème Brûlée is a triumph. Easy: with fast Gas broiling; sure: with Tappan's accurate controls. And shut-door Gas broiling keeps you and your kitchen cooler.



SAFE—WITH GAS. Oven, broiler, all burners light automatically. This Tappan is safe automatically, all over. If oven or broiler pilot goes out, this tiny "sentry" device shuts off the Gas automatically.

TAPPAN

Help like this makes parties fun! Try new recipes you never dared before—make old favorites newly great—with automatic controls to smooth every step. Have perfect roasts—with even Gas heat, *automatic* meat thermometer. Enjoy succulent barbecues—flame-browned, basted *automatically*. Sauces you never knew you could do are safe *automatically*, on the Burner-with-a-Brain. Guests late? No panic—"Keep-Warm" oven control (140°) holds meals "table ready" for hours *without overcooking*. This new, fabulously-styled Tappan "400" is a superb example of ranges built to Gold Star standards. At your Gas company or appliance dealer's. AMERICAN GAS ASSOCIATION

Easy modernizer: build this TAPPAN in, hang on a wall, or slide it in!

**LIVE MODERN
FOR LESS
WITH**

GAS



WHEN YOU SEE THIS GOLD STAR ON A RANGE, YOU KNOW IT COOKS FASTER, COOLLY, CLEANER—AUTOMATICALLY.

© A.G.A. Mark © Am. Gas Assoc., Inc.

• This advertisement appeared in LADIES' HOME JOURNAL, June 1961, and McCALL'S, June 1961



E. H. SMOKER

PERHAPS the best introduction for the newly elected president of the American Gas Association, Edward H. Smoker, is the one given him by his predecessor, Les Potter, in presenting him to the assembled delegates at the A. G. A. Convention in Dallas. Mr. Potter:

"Now with peculiar, particular pleasure, I present to you the new president of American Gas Association. This man is a keen perfectionist in everything he undertakes. He's blessed with a brilliant and incisive mind which, by the way, is testified to by the fact that he is a Doctor of Philosophy—having received that degree from the University of Cincinnati. He was named president of the United Gas Improvement Company in Philadelphia in 1955, having begun his career there as a research chemist. He has been extremely active in American Gas Association and is the former chairman of the General Research Planning Committee, and is therefore, and for other reasons also, very sensitive to this thing we call research. He is also a director and past president of the Pennsylvania Gas Association. I learn things about him as I go along—it says here he is a champion pool player. Well, after all, that takes skill, and he's got trophies to prove it. During this past year, particularly, in my own experience, I have come to greatly appreciate this man because he has an attitude and a spirit that, if you don't appreciate already, you will learn to appreciate also. It is my pleasure—and maybe you'd give him a standing reception—the new president of the American Gas Association—Ed H. Smoker."

JAMES M. BEALL
DIRECTOR, PUBLIC INFORMATION

BERNARD KAAPCKE
EDITOR

EDMUND KAHN
ASSISTANT EDITOR

RICHARD F. MULLIGAN
ART SUPERVISOR

EDITORIAL OFFICES:
AMERICAN GAS ASSOCIATION
420 LEXINGTON AVE., NEW YORK 17, N.Y.

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Dallas sets 'Greater Goals for Gas'

The 43rd Annual Convention of the American Gas Association adjourned in Dallas, Texas, on October 4.

Since then, congratulatory letters to A. G. A. headquarters have indicated an enthusiastic response among the 2,700 delegates and ladies who attended.

Solid, thought-provoking papers and addresses on both the problems and the opportunities of the gas industry, an unusually relaxed and friendly atmosphere for personal contacts, and a program conducted with precision and dispatch, all contributed to the Convention's success in carrying out its theme, "Greater Goals for Gas."

Singled out for special praise were the General Convention Committee, under chairmanship of L. A. Bickel; the Convention Entertainment Committee, headed by David J. Kerr; and both Lone Star and Southern Union gas companies of Dallas, for invaluable assistance.

Some typical comments of top-gas industry executives:

"Your Dallas A. G. A. meeting was the best planned and executed convention I have ever attended from both business and social standpoints."

"Never in my experience have I attended a convention that was so professionally staged, that maintained interest so well in every single session, and that reflected hard work which deserves every superlative in the dictionary."

"There never was a better planned or better operated Convention. . . ."

"The recent gas convention in Dallas was by far the best that I have ever attended."

"The new ideas I gained will help our company, which is growing at a rapid rate. . . ."

"Thank you for an enlightening and enjoyable event."

". . . outstanding, even for Texas."

Such comments indicate that the Convention, held in Dallas this year for the first time, may have helped start a new Texas tradition of "if not the biggest, then the best." While surpassed in numbers by some previous A. G. A. Conventions, this year's attendance showed a higher proportion than usual of gas company presidents and other top-management men.

Social high spot of the Convention was the President's Reception, Entertainment and Dance, held Tuesday night, October 3. Presented as an informal "Texas Party," at which Western garb was accepted dress, the event contributed notably to the ease with which delegates met and mingled throughout the Convention.

Social events for ladies included a luncheon, a style show by Dallas' Nieman-Marcus, a tour of the Dallas Trade Mart's Gas Appliance Center, and a "Gourmet Holiday" gas cooking presentation by Jonny Best, Houston Natural Gas Corporation.

Jinx Falkenburg, new gas industry TV hostess, greeted assembled delegates and attended many Convention functions.

Besides the formal program, special events added extra interest. Gas industry business at the highest national level was conducted at numerous incidental meetings of key groups and committees.

Among off-program events was a special tour of all-gas



A. G. A. President-elect E. H. Smoker receives symbol of office from retiring President L. T. Potter



Gas industry's new TV spokeswoman, Jinx Falkenburg, greets delegates



Grand opening, "Texas State Fair"

Southwest Housing, for editors of national magazines and prominent newspapers. Among other events for the press were an Editors' Lunch and a press conference at which gas industry heads met reporters.

Helping to keep delegates informed of proceedings, and presenting many industry sidelights not included on the formal program, was a continuous closed-circuit television broadcast from Convention headquarters, received on sets in strategic locations and in delegates' hotel rooms. The broadcast, consisting largely of interviews and discussions with notable persons at the Convention, was presented jointly by *Gas* magazine and the A. G. A. Promotion Bureau.

Preview showings were held of the award-winning film, "Gasarama."

Major attraction of the Convention were the exhibits. These included the A. G. A.-Parents' magazine *Advance Home* (covered in the October issue of the MONTHLY), a

display of magazine kitchens and laundries at the Texas State Fair (to be covered in the December issue), and an exhibit of new and significant gas air conditioning equipment at the Dallas Trade Mart.

More than 2,000 Convention delegates, and some 65 editors from newspapers, magazines, and the trade press, viewed the air conditioning exhibit.

Among equipment shown was a brand-new unit, not previously exhibited, by Caterpillar Tractor Company, and a new display by Solar Aircraft Company of its gas turbine unit. Attracting much interest was a working display describing the absorption cycle for gas cooling, by Carrier Air Conditioning Company.

Joining Solar Aircraft in the first joint display of gas turbine units were The Garrett Corporation; Orenda Engines, Ltd.; and Cooper-Bessemer. Gas engine driven models were shown by Bell & Gossett; Caterpillar; Continental Motors;

Mr. Heyke was assisted by two World's Fair "barkers"

John E. Heyke described future wonders of World's Fair



Speakers W. M. Elmer, left, and Gen. John A. Harris, right, with Convention Chairman L. A.





ing, "The off Convention



Past President Wister H. Ligon
tells of current plans for TV

GAMA President W. G. Hamilton
tied profits to cooperation



Don Durgin, NBC vice president,
told excitement of "Theatre 62"

as State
exhibit
at the
65 edi-
viewed

and I.C.E.D., Inc. Residential and commercial units were shown by Arkla Air Conditioning Corporation; Bryant Manufacturing Company; Comfortemp, division of Comfort Products, Inc.; and Gas Cool, division of Aero-Test Equipment Company, Inc.

An unusual attraction elsewhere was a preview demonstration by Preway, Inc., of its new gas dishwasher.

High points of the General Sessions program were a Court of Honor, at which outstanding gas industry achievements were honored by awards (see story elsewhere in this issue), and election of A. G. A. officers.

Dr. Edward H. Smoker was elected president of A. G. A., John E. Heyke was named first vice president, and Marvin Chandler was elected second vice president. Charles H. Mann was re-elected treasurer. (Officers, directors and Section chairmen and vice chairmen for the year just begun are listed elsewhere in this issue.)

Erik Jonsson, Texas Instruments,
sketched future management needs



With Lester T. Potter, retiring president of A. G. A. and president, Lone Star Gas Company, presiding, the three-day General Session program presented 11 addresses by leaders prominent in the gas industry, business or public life.

(Talks by President Potter and William J. Murray, Jr., chairman, Railroad Commission of Texas, are presented in full elsewhere in this issue. Reproduced in slightly abridged form are addresses by Perry I. Prentice, editor and publisher, *House & Home* magazine; W. M. Elmer, president, Independent Natural Gas Association of America; and General John B. Medaris, president, The Lionel Corporation.)

A highlight of the first General Session on Monday, October 2, was a presentation entitled "Century 21—Future on Parade," by William P. Woods, president, Century 21 Gas Exhibit, Inc., and president, Washington Natural Gas Company.

Mr. Woods described the fascinating gas industry exhibits

Opening session speakers were Wm. P. Woods, left; L. T. Potter; Perry I. Prentice; and Dr. Nicholas Nyaradi, formerly of Hungary



to be shown at the Seattle World's Fair (Century 21) opening on April 21, 1962. They will be seen, he said, by an expected 10 million visitors to the Fair.

Exhibits will include both working models of novel gas appliances and equipment, and displays showing what gas research will make available for the future.

Mr. Woods reported encouraging support of the exhibit by A. G. A. member companies, and urged others to join.

A similar presentation, "World's Fair—Showcase for Gas," was made during the Tuesday General Session by John E. Heyke, president, Gas Inc., and president, The Brooklyn Union Gas Company. This presentation dealt with the marvels of gas to be seen at the New York World's Fair, which will be held in 1964-65, two years after the Seattle Fair.

(Details of the two Fairs are set forth in the September and October issues of the MONTHLY.)

A featured speaker at the Monday General Session was Dr. Nicholas Nyaradi, director, School of International Studies, Bradley University, and former Minister of Finance of Hungary.

Dr. Nyaradi's talk, "Stronger than the Atom," was a defense of free enterprise, which he said would ultimately prevail against communism, provided we protect it against erosion and destruction from within.

Dr. Nyaradi saw a danger of war in the present crisis with the Soviet Union, because of the probability that Premier

(Continued on page 43)

THE BIG ROUND-UP

100 years of history

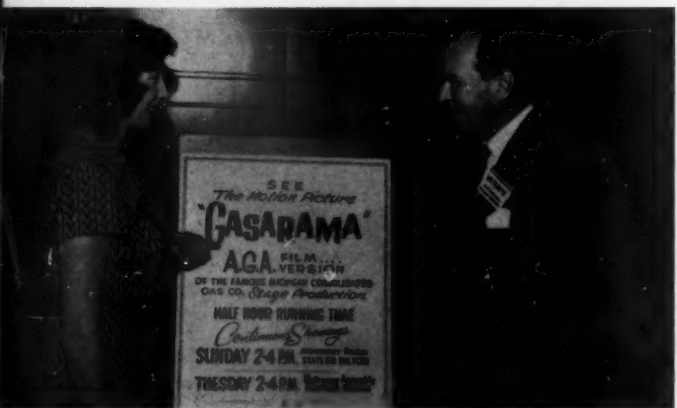
in the gas industry

(and in the U.S.A.)

go by in grand finale



A. G. A. Promotion Bureau and GAS magazine presented closed-circuit TV. Here Steve Van Osten interviews Jonny Best



Hope Deegan, A. G. A. Educational Service Bureau, and Noble D. Travis, Michigan Consolidated, collaborated on "Gasarama" film

What significant new gas appliances and equipment have been developed for the first time in the gas industry since October 1960?

You will find the answers at the 1962 A. G. A. Convention and Exhibit, in Atlantic City, N. J., October 7-10, 1962.

The 1962 Exhibit is expected to be the last full-scale A. G. A. Convention Exhibit until after the 1964-65 New York World's Fair.

Participation in the 1962 Exhibit is open to any manufacturer whose gas appliances or equipment qualify under the specific ground rules that will be set up shortly by the Exhibit Planning Committee. Most important of these rules is the requirement that the committee determine that the item submitted for approval is new to the gas industry since October, 1960, and significant technically.

Gas companies will also be invited to display their new developments in The Atlantic City Exhibit.

Francis K. Godwin, president, the Petersburg & Hopewell Gas Company, is chairman of the 1962 General Convention Committee.

Bruce A. McCandless, vice president-sales, Milwaukee Gas Light Company, is chairman of the Exhibit Planning Committee.

Hugh L. Wathen, vice president, South Jersey Gas Company, heads the Convention Entertainment Committee.

All requests for further information about the 1962 A. G. A. Convention Exhibit should be addressed to the American Gas Association, 420 Lexington Avenue, New York 17, New York, attention Exhibit Planning Committee.



All the girls (and boys) take a curtain call at final luncheon pageant, "Watching All the Girls Go By," emceed by C. S. Stackpole



Mrs. Eskil Bjork, as girl of 1916 cheering the doughboys onward



Mrs. J. Theodore Wolfe, as girl of ragtime era when fashions were bold



Mrs. David J. Kerr, in the wasp-waisted style and petticoats of 1885



Mrs. L. A. Bickel brought delegates back to today, and the curtain down



Mrs. L. A. Dixon, Carl Cloud as 1925 "Flaming Youth." (Gas flame)



Gas industry unity gets Yanks and Rebs together. Mrs. W. G. Armstrong, Clark Belden, Mrs. W. H. Ligon, Robert Suttle



R. A. Puryear, Mrs. R. J. Rutherford, Robert Brigham "by the sea, by the sea, by the beautiful sea" in year 1902

Gas industry finance for first nine months summarized

Prepared by A. G. A. Bureau of Statistics

Gas industry financing totalled \$1,552.4 million during the nine months ended September 30, 1961, an increase of 23.2 per cent above the \$1,259.6 million recorded for the same period in 1960. The ratio of debt to equity securities was relatively unchanged at 72.8 per cent of total financing this year, compared with 72.4 per cent the previous year. In the current period, however, debentures sold were almost 2½ times the amount sold in 1960, while the total of bonds floated declined 1.6 per cent. Common stock issues accounted for 14.6 per cent of all money raised so far this year, compared with 17.1 per cent last year, while preferred stock issues which accounted for 10.5 per cent last year advanced to 12.6 per cent this year.

Straight gas operating utilities and holding companies accounted for 56.7 per cent of the total volume of financing during the first nine months of 1961 as against 55.1 per cent in the same period in 1960, with the respective balances having been raised by combination gas and electric operating and holding companies.

Straight gas operating utilities sold \$737.2 million of securities from January 1 to September 30, 1961, an increase of 18.1 per cent over the same nine months of 1960. The dollar volume of common stock issues sold declined nearly 41 per cent from the earlier year level, while preferred stock issues rose 58 per cent. As a result, common stock issues comprised only 11.0 per cent of the total financing done by this segment of the gas industry compared to the year earlier figure of 22.0 per cent. Preferred stock issues were 9.2 per cent of the total as against 6.9 per cent in 1960. Heavy reliance upon debt issues for new funds, paced by a nearly 200 per cent increase in debentures sold, raised the debt equity ratio for this group of companies to 79.8 per cent. The comparable 1960 ratio was 71.1 per cent.

Combination gas and electric operating utilities raised \$672.1 million from the sale of securities during the first nine months of 1961, an increase of 26.8 per cent from the \$530.2 million secured during the same 1960 period.

The amount raised by common stock issues was nearly ten times the prior year figure of \$15.0 million, while preferred stocks sold increased by 41.8 per cent. Currently, debt issues comprised 59.4 per cent of the 1961 volume of financing accomplished by this group of companies, compared with 80.2 per cent in the corresponding nine months of 1960.

In the first nine months of 1961, gas holding companies sold \$143.1 million in securities, of which \$142.0 million was in the form of debentures, and the balance in preferred stock and bonds, each in a sum under \$1 million. The same group of companies sold \$27.0 million of common stock and \$43.0 million

of debentures the previous year. Combination gas and electric holding companies sold \$35.0 million of common stock last year, and so far this year, have not entered the capital market for new money.

The above data have been compiled from information appearing in the daily press, financial publications and company sources, and do not purport to include any unpublicized financing. At times, these data will differ from that reported by other publications, insofar as anticipated or arranged financing is included, only when the transfer of funds has been completed, and that direct exchanges of securities are eliminated.

TOTAL GAS INDUSTRY FINANCING* NINE MONTHS ENDED SEPTEMBER 30

	Amount (Millions)		Per Cent Change	Per Cent of Total	
	1961	1960		1961	1960
Common stocks	\$ 226.9	\$ 214.5	+ 5.8	14.6	17.1
Preferred stocks	195.6	132.8	+ 47.3	12.6	10.5
Bonds	722.8	734.9	- 1.6	46.6	58.3
Debentures	392.5	170.1	+130.7	25.3	13.5
Notes	14.6	7.3	+100.0	0.9	0.6
Total	\$1,552.4	\$1,259.6	+ 23.2	100.0	100.0
Straight gas companies*	\$ 880.3	\$ 694.3	+ 26.8	56.7	55.1
Combination companies*	672.1	565.3	+ 18.9	43.3	44.9
Total	\$1,552.4	\$1,259.6	+ 23.2	100.0	100.0

* Includes holding companies.

STRAIGHT GAS OPERATING UTILITY FINANCING NINE MONTHS ENDED SEPTEMBER 30

	Amount (Millions)		Per Cent of Total	
	1961	1960	1961	1960
Common stocks	\$ 81.5	\$137.6	11.0	22.0
Preferred stocks	67.7	42.8	9.2	6.9
Bonds	347.9	359.6	47.2	57.6
Debentures	230.5	77.0	31.3	12.3
Notes	9.6	7.3	1.3	1.2
Total	\$737.2	\$624.3	100.0	100.0

COMBINATION GAS AND ELECTRIC OPERATING UTILITY FINANCING NINE MONTHS ENDED SEPTEMBER 30

	Amount (Millions)		Per Cent of Total	
	1961	1960	1961	1960
Common stocks	\$145.5	\$ 15.0	21.6	2.9
Preferred stocks	127.5	89.9	19.0	16.9
Bonds	374.1	375.2	55.7	70.8
Debentures	20.0	50.1	3.0	9.4
Notes	5.0	0.0	0.7	0.0
Total	\$672.1	\$530.2	100.0	100.0

PRESIDENT

E. H. Smoker, president, The United Gas Improvement Co., Philadelphia, Pa.

FIRST VICE PRESIDENT

John E. Heyke, president, The Brooklyn Union Gas Co., Brooklyn, N. Y.

SECOND VICE PRESIDENT

Marvin Chandler, president, Northern Illinois Gas Co., Aurora, Ill.

TREASURER

Charles H. Mann, treasurer, The Columbia Gas System, Inc., New York, N. Y.

RETIRING PRESIDENT

Lester T. Potter, president, Lone Star Gas Co., Dallas, Texas. (Automatically becomes a director upon completion of his term as Association president.)

DIRECTORS

*D. S. Bittinger, president, Washington Gas Light Co., Washington, D. C.

H. D. Berger, president, The Peoples Natural Gas Co., Pittsburgh, Pa.

†L. A. Brandt, president, The Peoples Gas Light and Coke Co., Chicago, Ill.

H. Reid Derrick, president, Laclede Gas Co., St. Louis, Mo.

*Buell G. Duncan, president, Piedmont Natural Gas Co., Inc., Charlotte, N. C.

*H. A. Eddins, president, Oklahoma Natural Gas Co., Tulsa, Okla.

W. M. Elmer, president, Texas Gas Transmission Corp., Owensboro, Ky.

William G. Hamilton, Jr., president, American Meter Co., Inc., Philadelphia, Pa.

A. W. Johnston, vice president in charge of gas operations, Boston Gas Co., Boston, Mass.

*Oakah L. Jones, president and general manager, The Consumers' Gas Co., Toronto, Ontario, Canada

Roy E. Jones, president and general manager, North Shore Gas Co., Waukegan, Ill.

*Walter T. Lucking, president, Arizona Public Service Co., Phoenix, Ariz.

Ono W. Manz, Jr., executive vice president, Consolidated Edison Co. of New York, Inc., New York, N. Y.

*Ralph T. McElvenny, president, Michigan Consolidated Gas Co., Detroit, Mich.

E. Clyde McGraw, president, Transcontinental Gas Pipe Line Corp., Houston, Texas

*Gerald T. Mullin, president, Minneapolis Gas Co., Minneapolis, Minn.

*S. Lloyd Nemeyer, president, Milwaukee Gas Light Co., Milwaukee, Wis.

Dale B. Otto, president, New Jersey Natural Gas Co., Asbury Park, N. J.

*John W. Partridge, president, The Columbia Gas System, Inc., New York, N. Y.

R. T. Person, president, Public Service Co. of Colorado, Denver, Colo.

*R. A. Puryear, Jr., president, Alabama Gas Corp., Birmingham, Ala.

*J. F. Ray, vice president, General Controls Co., Glendale, Calif.

A. B. Ritzenhaler, vice president—sales, The Tappan Co., Mansfield, Ohio

*R. J. Rutherford, president, Worcester Gas Light Co., Worcester, Mass.

*Judson S. Sayre, chairman of the board, Norge Sales Corp., Chicago, Ill.

*S. L. Sibley, vice president and general manager, Pacific Gas & Electric Co., San Francisco, Calif.

†Watson F. Tait, Jr., executive vice president, Public Service Electric & Gas Co., Newark, N. J.

Guy W. Wadsworth, Jr., president and general manager, Southern Counties Gas Co. of California, Los Angeles, Calif.

*John H. Wimberly, president, Houston Natural Gas Corp., Houston, Texas

†William P. Woods, president, Washington Natural Gas Co., Seattle, Wash.

ACCOUNTING SECTION

Chairman—Arthur Skelton, general superintendent, accounts division, The Peoples Gas Light & Coke Co., Chicago, Ill.

Vice-Chairman—Albert J. Klemmer, auditor, Rochester Gas & Electric Corp., Rochester, N. Y.

* Newly elected or re-elected for two-year term.

† L. A. Brandt, W. F. Tait, Jr., W. P. Woods were appointed by the A. G. A. Board of Directors to fill the unexpired terms of E. I. Bjork, W. J. Harvey, C. M. Sturkey, respectively.

Officers, Section leaders elected



Marvin Chandler, 2nd vice president; Edward H. Smoker, president; John E. Heyke, 1st vice president. Not shown is Charles H. Mann, treasurer

GENERAL MANAGEMENT SECTION

Chairman—William B. Tippy, president, Commonwealth Services Inc., New York, N. Y.

Vice-Chairman—Donald B. Beecher, president, Equitable Gas Co., Pittsburgh, Pa.

INDUSTRIAL AND COMMERCIAL GAS SECTION

Chairman—W. D. Relyea, assistant manager, Industrial and commercial sales, Public Service Electric and Gas Co., Newark, N. J.

Vice-Chairman—Walter E. McWilliams, assistant general sales manager, The Peoples Natural Gas Co., Pittsburgh, Pa.

OPERATING SECTION

Chairman—E. F. Trunk, chief engineer, Laclede Gas Co., St. Louis, Mo.

Vice-Chairman—A. B. Lauderbaugh, assistant vice president, The Manufacturers Light and Heat Co., Pittsburgh, Pa.

Second Vice-Chairman—Jay Davis, Jr., vice president, Southern Counties Gas Co., Los Angeles, Calif.

RESIDENTIAL GAS SECTION

Chairman—Frank McLaughlin, vice president, Providence Gas Co., Providence, R. I.

Vice-Chairman—James J. Condon, assistant vice president, The Peoples Gas Light and Coke Co., Chicago, Ill.

E. C. McFadden presented National Safety Council Award to A. G. A., and Jinx Falkenburg accepted it



Top awards went to: E. L. Spanagel (Industrial-Commercial Achievement); D. Menegakis (Beal Medal); A. H. Cramer (Distribution Achievement), and W. R. Stephens (Distinguished Service Award)



Bruce McCandless, right, presents N. D. Travis award for "Gasarama"



President Potter presented Operating Section Awards of Merit at the Section meeting

Outstanding contributions in many fields of gas industry endeavor win public recognition at Dallas Convention

Court of Honor lauds high achievements

Recognition of outstanding accomplishment provided a dramatic highlight of the 1961 Convention.

In a General Session Court of Honor, and at Section meetings, the gas industry recognized exceptional contributions of its members, and in turn was recognized by the National Safety Council for its achievement in the field of accident prevention.

On behalf of the industry, retiring A. G. A. President Lester T. Potter presented awards to those honored by the Association, and accepted the NSC's 1961 Association Safety Award.

The Distinguished Service Award, A. G. A.'s highest honor, was awarded to W. R. Stephens, chairman of the board and president of Arkansas Louisiana Gas Company.

The award was established in 1929,



McCALL'S magazine sponsored Home Service Achievement Awards



President Potter presented Order of Accounting Merit Awards



These trophies were awarded for achievement in Public Relations



A. G. A. Safety Achievement Awards honored exceptional records

and is presented annually by A. G. A. to the individual "who has recently made the most outstanding contribution to the general interest of the gas industry."

In his presentation, President Potter cited Mr. Stephens as the industry's "pioneer in the resurgence of gas air conditioning and gas lighting," and said:

"Mr. Stephens' company acquired Servel's air conditioning division at a time when the future of residential gas air conditioning appeared hanging in the balance. Through energetic merchandising, industry cooperation and development engineering, he proved that gas air conditioning would 'go,' if it were sold aggressively.

"Realizing the glamorous and nostalgic possibilities of gas decorative

lighting, Mr. Stephens also undertook the manufacture of gas lights at a time when no one took this small-volume, novelty-type business seriously. Today, the largest manufacturer of gas lights, his company is largely responsible for the fact that there now are more outdoor gas lights installed than during the heyday of gas lighting 50 years ago."

The Beal Medal of the A. G. A. Operating Section was presented to Demosthenes Menegakis, former staff engineer for The Brooklyn Union Gas Company, now associated with the Corporation for Economic and Industrial Research, Inc.

In conferring the award in the convention's second general session, President Potter noted that the coveted medal, granted for authorship of an outstanding technical paper presented

before an A. G. A. meeting or printed in the Association's monthly magazine, has been presented only once since 1956. W. M. Moore of United Gas Corp., Shreveport, La., won the medal in 1960.

Mr. Menegakis received the award for his paper, *Experimental Investigation of Flow Characteristics of Low Pressure Services*, read at the A. G. A. 1961 Distribution-Production Conference in Philadelphia.

Top honors in the fifth annual A. G. A. Public Relations Achievement Award competition went to the United Fuel Gas Company.

President Potter told delegates the West Virginia company has been credited with "the year's outstanding contribution to greater understanding of the gas industry and modern gas service."

United Fuel Gas Company's winning entry, competing in the Employee Communication category, was based on an effective program of keeping its personnel at all levels fully advised on all new plans and policies. The company's objective is to strengthen information channels, through which customers and the general public can get an accurate, clear picture of United Fuel's progress and goals.

Seven other companies also received first-place awards as winners in specific public relations categories. They were: The Columbia Gas System, Inc., press relations; Iowa Power & Light Co., franchise election; Michigan Consolidated Gas Co., special event; Northern Illinois Gas Co., financial relations; Northern Indiana Public Service Co., area development; Philadelphia Gas Works Division, The United Gas Improvement Co., customer relations;

Southern California Gas Company, community relations.

Additionally, special Awards of Excellence were made to seven companies: Dayton Power and Light Co., Iowa-Illinois Gas and Electric Co., Minnesota Valley Natural Gas Co., New England Gas and Electric Association, Northern Natural Gas Company, Peoples Gas System, and Texas Eastern Transmission Corporation.

Mr. Potter presented United Fuel Gas Company with a striking 19-inch trophy symbolizing the progressive spirit and service character of the gas industry. Three graceful arches form a pyramid which supports a blue-tinted, flame-shaped pillar. On the base of the trophy are inscribed the three major dimensions of sound public relations—"Integrity, Enlightenment, Achievement."

Smaller desk replicas of this trophy were presented to United Fuel Gas and

the seven other first-place winners.

Top honors were won last year in the contest, sponsored by the A. G. A. Public Information program, by Minneapolis Gas Company. Previous winners were Southern California Gas Company, in 1957; Quebec Natural Gas Corporation, in 1958; and Michigan Consolidated Gas Company, 1959.

Anthony H. Cramer, executive assistant for Michigan Consolidated Gas Company, received the Distribution Achievement Award of the A. G. A. Operating Section.

Donated by the American Meter Company, the award is presented annually to an individual who has made an outstanding contribution to the science and art of gas distribution during the year, or an outstanding contribution which has gained gas industry acceptance during the past five years.

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Meet your Association staff



Roy A. Siskin

Homecoming week for Roy Siskin, senior research engineer in PAR Research, occurs every year during the Research and Utilization Conference in Cleveland.

Roy is a native of Cleveland and started his gas industry career there with the A. G. A. Laboratories. He attended local schools in Cleveland and graduated from Case Institute of Technology with a degree in chemical engineering. After graduation, Roy worked for a Cleveland water heater manufacturer. Then came the war.

Roy enlisted in the army and was assigned to air corps cadet school. He was commissioned as an engineering officer and was sent to the China-Burma-India theater in 1943.

For 31 days Roy cruised the Pacific with 6,000 fellow G.I.'s aboard a 1,200-passenger-capacity "luxury" liner. At the end of the voyage, Roy's group switched to a train for a five-day trip across India. Finally, Roy reached his destination at an air base near the India-China border. He unloaded and set up shop to keep the planes flying for the next two years.

In 1946 Roy sailed home. He celebrated his return to civilian life with two big events: he married the girl he had met in front of the Cleveland Art Museum before the war, and he joined the A. G. A. Laboratories as a research engineer. Roy

remained with the Labs and did research on gas industry developments (one of his projects was the high speed deep fat fryer) until 1951, when he moved to New York.

Roy lives in Malverne, Long Island, with his wife Dorothy, their two children, Marlene, 13, and Cliff, 11, and a dog named "Teekah." "Teekah" is Hindustani for "O.K."

Roy has his own woodworking shop at home. He has built a closed-in porch on the house and finished his basement. When he is not busy at carpentering and woodworking, he collects stamps and coins. For outdoor activity, he plays tennis.

During the week, Roy is busy with research into the domestic, industrial and commercial utilization of gas. He investigates new developments and processes, such as new devices for ignition and oven redesign to reduce baking time.

In addition he is treasurer of the Society for the Advancement of Food Service Research and is currently a candidate for president.

One other group that receives Roy's attention is the A. G. A. chapter of C.B.I. veterans. Occasionally, Roy gets together with Bob Smith, assistant director of research, and Irwin Schwimmer, assistant director, Statistical Bureau, to talk about World War II days in the Far East.

Here is one gas industry trio that has come a long way since then.

The spirit of an industry



By L. T. POTTER

*President
American Gas Association
President
Lone Star Gas Company*

During a period of time, now extending almost to a year, it has been my proud privilege to serve as the president of American Gas Association. As we approach the end of this year, it is a part of this privilege which has been mine to present to you the President's address. I choose to address you under the subject, "The Spirit of an Industry." This is my choice because the spirit of our Industry is the most important single factor in determining our welfare.

In order to address myself to this subject, I lay aside the statistics available in such quantities about our Industry; I refrain from attempting to catalogue all activities in the program of the Association; and I forego comment about growth and other natural developments in the progress of our Industry. I want to make an effort to describe the true essence of our Industry situation, particularly in relation to this Association year.

This thing we call "The Spirit of an Industry" is quite undefinable except in terms of events and actions. So, in order

to describe the spirit of our Industry, I will talk about some of the developments in this Association year—the developments which, in my opinion, most pointedly reflect this spirit which is our subject.

The spirit is apparent in the work of our Association staff, whose performance is outstanding. We see here a result flowing out of the competence and attitude of the people who work on the staff, who are reacting favorably to a high quality of administrative guidance.

But good staff work cannot arise solely out of the talents, energies and dedication of our staff people even with fine administration added. There must also be a high degree of responsiveness between staff and Industry. The Association staff must know what Industry wants; must assist Industry to determine what it wants; must act to help Industry achieve what it wants. An association must be in tune with its industry—and vice versa—and, being in tune, they must play good music together.

The best index—the best because it is most direct—the best index of this vital responsiveness of an Association to its Industry—and vice versa—is to be found in the Committee work of the Association. It is with this thought in mind that I direct our attention now to a brief

review of some of the Committee work in American Gas Association. Again I say, I will not undertake to catalogue completely but will describe programs in order to develop a portrayal of the spirit of our Industry. I do want to say that without material exception, we are achieving a high effectiveness in all of the Committee work in our Association, but I will discuss only selected examples.

There was a cynic once who said, "If Moses had been a Committee, the children of Israel would still be in Egypt." But, if ever we are inclined to be impatient about Committee work, we should remember the pluses which come to us out of such work. Out of Committee work we get the plus of information exchange, the plus of debating, the plus of becoming better acquainted with our fellow committeemen, the plus of using persuasion, and even sometimes the plus of negotiating a favorable response. All these pluses—and more—we get, in addition to normal fulfillment of a committee assignment.

One committee which has used all the pluses to accomplish its purpose is the Gas Industry Development Committee. The most recent work of this Committee is to be submitted at this Convention. I express the judgment that this Committee's work is a superlative example of an Industry working for itself

● Spirit of an industry is shown in cooperative efforts of gas industry

in an Association.

The work of the Gas Industry Development Committee has been one of appraisal and projection—an appraisal of the state of our Industry and a projection of our Industry into expectations of the future. We would have, you know, only a rather forlorn hope of achieving our expectations for the future unless we define and consciously work toward these expectations. It is true, I suppose, that in the affairs of men some very fine things may seem to just happen, but, if ever this were so, there would be little credit due the people to whom such fine things happen. The truth is, we must acknowledge that we can affect the things to come by undertaking to foresee them now.

Now would be the time to exhort you about implementation, about activation, about prosecution of the Gas Industry Development program. Surely, this industry will be businesslike and purposeful in pursuing the Gas Industry Development program, and I would foster and encourage action to this end. I have an abiding conviction, however, that the Gas Industry Development program will be carried out subject to circumstances and in the normal course of action by our companies, our association committees, sections and bureaus; but the results will be controlled by the spirit of our Industry.

The Gas Industry Development Committee program is not an ex parte proposition, developed outside the Industry and applied to the Industry as one would apply a poultice or inject a vitamin. This program comes from our Industry, for our Industry, reflecting the attitude . . . yea, the spirit of our Industry. The fact that our Industry could produce such a program, has welcomed such a program, and can be expected to react to such a program, bespeaks the high state of that quality of the Gas Industry which we have under discussion this morning. We see in the Gas Industry Development Committee program—strong and clear—The Spirit of An Industry.

There is another shining example of our theme which I would emphasize. There is an increased—greatly increased

—enthusiasm in our Industry now for research; association research and company research. This attitude is not new or surprising, but it surely is a point for noting that the Industry is now at a new, high level of enthusiasm and unanimity in regard to research. It would almost seem that our Industry has just recently come to a full realization that there is a future of unimaginable allure available to us, if we only stir ourselves sufficiently to discover and develop the "new" beyond our present horizon. We are recognizing more than ever that the pursuit of the "new" in our business is a fascinating and rewarding process. In the keen appetite for research, we see impressively expressed the forcefulness and purpose of an industry; qualities which are carrying us to a new high in industry effectiveness; and, again, we see reflected The Spirit of An Industry.

FPC adopts proposals

In June 1960, the Board of Directors of American Gas Association directed that work be done in an effort to improve the state of regulation as it was being applied to the Industry. To carry out this Board directive, a Committee was appointed and named "The Special Committee of Executives on Regulatory Affairs." This Committee has carried out a program of work which has been complex in nature, enormous in magnitude and difficult in execution. Yet, in the face of the patent difficulties, the Committee has wrought mightily.

First, the Committee was able to define the basic problem and to agree upon an approach toward solution, both in general and in detail. At this point, it should be stated that the Committee concluded to limit itself in the first phase of its work to efforts to improve the application of regulation at the Federal level of government. There is, I am sure, no disposition on the part of the Committee to overlook or disregard the importance of regulatory affairs otherwise in relation to our Industry, but it was concluded that regulatory delay in proceedings before Federal Power Commission should have first attention in the work of the Committee.

The tremendous amount of work

which has been done so far by SCERA is reflected quite fully in the printed report of the Committee, dated March 7, 1961. This report contains all the suggestions the Committee makes about means to improve regulation at the Federal level. The Committee's judgment is expressed in this report to the effect that the adoption of all, or substantially all, of the suggestions therein would largely eliminate the undue regulatory delay which is so troublesome to all concerned, insofar as such improvement may be brought about under present laws. There are to be found in the report also some suggestions about legislative changes.

I emphasize the point that SCERA gathered together for its use all the responses to its inquiries addressed to the president of each member company in A. G. A. and, as well, the considered, individual thoughts of the Committee members. I would emphasize also that the work, the thinking and the action of the Committee was not a program apart from the Industry as a whole, but rather was a remarkably fine and acceptable representation of the Industry in regard to the matters assigned to the Committee.

SCERA's printed report was promptly and judiciously distributed, after required approval was had, to the many officials and other individuals expected by SCERA to have more than an ordinary interest in the subject matter. As a firmly based opinion, I would state that the reception of the report has been encouraging to a considerable degree. Three of the suggestions made by the Committee have already been instituted by Federal Power Commission. Still others of the suggestions have been accorded favorable attention, and it would not appear to be unduly optimistic to suggest that a substantial portion of the SCERA suggestions or the equivalent will be adopted within the reasonably near future. The favorable developments already forthcoming fully justify the great effort of the Committee in preparing and publishing its report.

Again, however, as in the case of my comments about the GID Committee reports, I cannot refrain from pointing

out that there is an element of overriding importance attached to the SCERA work, over and above the content of a report. Here in the work of SCERA we see an Industry reflected; an Industry which has the substance, the maturity, the cohesion and the force necessary to permit it to produce and sponsor just such proposals as contained in the SCERA report. We see an Industry measuring up to its responsibilities in its own interest without violating any of its responsibilities in the public interest. We see an industry which is strong enough so that its company segments have no fear of promulgating Industry thinking which is sound and strong. We see the wisdom and strength of an industry brought to bear to reflect that Industry in the image which it should create. One might well feel proud to be a working part of an Industry that displays such a spirit. So, again I say in reference to the work of SCERA, "Here, too, we see—The Spirit of An Industry."

The final specific reference I would make to Industry activity in connection with our Association and in relation to this subject I am using today is to describe a program of work which is generally referred to as the Industry Understanding Program. The Industry Understanding Program developed and proceeded out of the severe and complex problems having their origin mostly in connection with Federal regulation of the producer of natural gas. It is sufficient for the present purpose to say that the regulatory problems with which the gas producer had become confronted, when considered together with those problems as they were translated to other segments of the Industry out of the producers' problems, became long since insurmountable and altogether impossible of solution under the interpretations of the law then and still existing, involving regulation at the Federal level.

Faced with a literally intolerable situation the petroleum industry, in various manifestations, began to stir itself again after prior inconclusive efforts, and the current program began during the year 1959. I remember that it was only with

conscious forbearance, accompanied by some degree of apprehension and after deliberate soul searching, that American Gas Association was willing to approve President Wolfe's recommendations to the Executive Committee that A. G. A. undertake a leading role in working toward an Industry solution to the Industry problems involving the producer.

The program did begin and it initially appeared to be an attempt to solve the unsolvable. People used to talk about achieving "unity" in the gas industry, but the three industry segments of producer, transporter and distributor, each having many divergent, if not conflicting, interests with each of the others, did not react to pleas for unity. So, "unity" was abandoned as the keynote word for the effort. Next, we talked about "harmony" as the word descriptive of the relations to be desired between the three segments of our gas industry. Soon, it became clear that "harmony" was a mirage so long as each of the three segments was suspect as to motives in the eyes of the other two. The industry representatives involved in the work wisely came to the conclusion that, regardless of anything else, there needed to be developed a greater degree of understanding in the gas industry about the gas industry as between the three segments of producer, transporter and distributor.

Industry segments confer

As the meetings were held and work was done to develop understanding, it became clear that the representatives of the three segments were achieving an increase in understanding and even were exhibiting a greater degree of tolerance, one for the other. It came to be acknowledged by the conferees that no man was subject to being classified in an uncomplimentary category just because he happened to be a producer—or a transporter—or a distributor of natural gas. One could feel sure at this point, if not before, that real progress was being achieved in the program.

As we reconstitute and review progress in the program to achieve greater understanding, we should keep in mind that there was need, not only to improve

understanding of one segment of our industry about another, but there was great need also to improve understanding on the part of each of the three segments about itself. In addition, it should be kept in mind that each segment of the industry was approaching its difficult situation in a spirit of disillusionment—a disillusionment arising out of disappointment that things were not as "rosy" as they once appeared. Remember that the producer was generally as pleased as a youngster with a new toy when the beginning and the initial growth of interstate gas transmission resulted in his having a market for gas production that had before been unmarketable. At the same time, the transporter was finding things much to his liking, because gas supplies were available, as were markets, and financial leverage made interstate transportation of gas a very attractive field of endeavor to those able and enterprising enough to conceive and activate a project. Then, when natural gas arrived for the distributor, particularly the established ones theretofore dealing in manufactured gas, the new, natural supply seemed almost to qualify as "manna from heaven"; almost the complete happy answer to his distribution dilemma.

Allowing for some differences in timing, we see all three segments of our gas industry at a period in the past being very much in the attitude of saying, "It is a wonderful world—the wonderful world of the gas business!" But, then, troubles set in.

The producer began to realize that he was selling his gas at too low a price, and he was having difficulty recalling how greatly he enjoyed the early days of new markets for his gas. His conclusion that he was selling his gas too cheap was made all the more firm when some of the bloom began to go off the oil producing business.

The transporter began to feel trapped because financial leverage seemed to be disappearing, costs were increasing, including field prices for gas, and delays were becoming more frequent and protracted in the processing of his applications for rate adjustments. He began to

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Gas Appliance Center in Dallas Trade Mart housed many displays

Convention exhibits viewed by thousands



Part of the gas-lit Arkla exhibit at the Gas Appliance Center

New York World's Fair Gas Exhibit Building model was on view



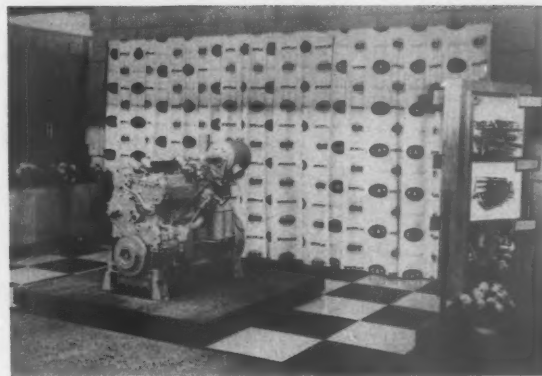
Corridors of Convention headquarters at the Statler Hilton Hotel were lined with colorful displays



PAR Research exhibit showed color photos of numerous projects under current development



A. G. A. Accident Prevention display showed safety education and training materials



GAS AIR CONDITIONING
New types of residential, commercial and industrial cooling units in wide capacity range were shown in a major equipment exhibit at the Dallas Trade Mart



Public Information exhibit showed wide range of printed and pictorial materials telling the gas industry story



A. G. A. gas industry advertising in print and on television was covered in this eye-catching poster array

The new home market

By P. I. PRENTICE

Editor & Publisher
House & Home Magazine

The best program anybody ever wrote for how to sell the new house market was written by your own Jerry Mullins and distributed to all of you by Chet Stackpole. It was so good that I'd just crib it wholesale and read it aloud to you this morning if I thought I could get away with it. But I'm afraid some of you may have read Jerry's advice carefully enough to remember it, so I'll have to change it. I can't change the advice, because the advice is too good to change, so I'll just have to change the way he worded it.

"Don't do it the hard way—do it the easy way. Make the right friends—and let them influence people for you. Don't try to do all the selling yourself—let somebody help you, or perhaps I should be a bit more specific: let the right somebody or somebodies help you make your sales.

"Unless you get help from all the somebodies who are in a position to help your sale if they are with you, or switch your sale to some other fuel if they are not with you, you will find the

new house market is mighty hard and mighty expensive to sell."

That's Jerry Mullins' advice. That's Chet's advice. That's the advice we get from smart utility men in city after city. So that's *House & Home's* advice, too.

The new house market is too big to sell without help. It's so big that the industry that builds those new houses has to be the biggest industry in America—much bigger than the steel industry, much bigger than the railroad industry, much bigger than the automotive industry, much bigger than the electrical industry, much bigger than the oil industry, much bigger than the gas industry.

It's so big that it provides the biggest market for many of our other big industries. It generates more than a quarter of all the freight revenue of the railroads. It is the principal market for the lumber industry. It is the biggest market for Portland Cement—much bigger than the highway program we hear so much more about. It

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What's in it for me?

By W. G. HAMILTON, JR.

President
Gas Appliance Manufacturers Association

During the 1950's we were one of America's fastest growing industries. Did this happen simply because we were in the gas business and just because our fuel was magnificent in all respects? Or did it happen because it was made to happen?

During the decade of the fifties we moved forward as an industry. We moved forward largely because we pooled our talents, our efforts, and our money and welded ourselves into a striking force which could withstand the thrusts of the competitive giants which power the electric industry.

We achieved, at the industry level, a competitive capability which was completely out of reach to us as individual operators.

We got together and strengthened our industry,

Strengthened our research,

And strengthened our advertising, our promotion and our public relations.

All this was achieved during the 1950's at the industry level.

So, in answer to the question, "Has cooperation paid dividends?" I submit that one of the greatest single assets you

and I have as individual gas utilities and individual manufacturers, is a strong, unified gas industry. And I further submit that cooperation has paid big dividends in the form of industry growth, industry prestige and competitive capability.

However, regardless of our progress of the past, you and I now stand on the threshold of a new era—and the so-called soaring sixties are only a part of this already begun era of new dimensions.

Certainly we are entering an era of bigger, more lucrative markets—but the demands of these coming markets cannot be measured by the standards and norms of yesterday or today.

People's desires and demands are changing—people are becoming more knowledgeable and more sophisticated. The conveniences and modernity of today simply will not satisfy the people of tomorrow any more than a 1951 gas range would meet the demands of the homemaker of today.

Think, if you will, about the changes you and I have witnessed in just the

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I am here to talk about research. I am flattered that any group is willing to entertain my views on this subject, and I am both flattered and encouraged that this particular Association is willing to do so. My remarks today will be directed primarily toward the future, believing as I do, with John Galsworthy, that "If you do not think about the future, you cannot have one."

However, an estimate of the future is never truly factual. Therefore, in attempting to look over the horizon I will combine my own practical experience with a measure of what I hope is imaginative philosophy.

Let us consider scientific and technological research. What gives it stimulus and direction? What are its social and economic implications? What does it mean here in Dallas, now, to the members of the American Gas Association?

The first fact that I consider essential to an understanding of what research means to us individually, to you professionally, and to all of us na-

tionally, has to do with the rate of technological advance. The curve of advancing knowledge in the physical sciences has turned upward at a dizzy rate. Each new discovery not only provides a vertical building of the structure of scientific knowledge, but also a vast horizontal growth reflecting the application of technology and the exploitation of discovery. Each new finding in fundamental or basic science opens up new challenges for the applied scientists and engineers, who must interpret the results and translate those results into new products and new services that defend and enrich our unshackled society. Thus, both science and technology tend to advance at an ever-increasing rate, and hopefully, to our national benefit.

As an eleven-year-old schoolboy in Springfield, Ohio, I had little inkling of the wonders or woes that this century held in store for my generation. I doubt that the word *research* was in my vocabulary or consciousness, since I was busily engaged with a newspaper

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Without research?

By GEN. JOHN B. MEDARIS

President
The Lionel Corporation

I am of the firm belief that the public regard for the gas industry has been and is suffering a very severe setback.

There is no valid reason why this situation should exist, and I believe that we can remedy it if we all try.

There is no reason, in my opinion, for spending millions of dollars to develop new forms for the use of gas, to improve our appliances, to sell air conditioning load, et cetera, unless we can place our industry in a position where we are highly regarded by the general public and the legislative and investment groups of this country.

A few years ago the A. G. A. and INGAA Public Relations Committees carried on a survey to see the general attitude of the public toward our industry. The results were not good, and they have become worse since that time. A considerable amount of money was spent on this study by both organizations, and, to the best of my knowledge, nothing of any consequence has been done as a result of the findings of the study. Something should have been done, and, in my opinion, it can—not necessarily through the A. G. A. Public Relations

Committee, or the A. G. A. or any other association, but through a concentrated effort on the part of all representatives of all companies making up the natural gas industry.

The state of disrepute in which we find ourselves today is, in part, of our own making. The distributors have been subject to continual criticism by many segments of the country, primarily because of their requests for rate increase after rate increase. Others have put the entire blame on the pipeline industry. Then, still others have said it is all the fault of the producer. But all three segments are obtaining more than their share of unjust public opinion. In each case, certain of this criticism has been brought about or sponsored by one or more segments of the industry against the other.

I am sure all of you have followed the many pieces of proposed legislation that have been introduced in this Congress, the enactment of any one of which would have caused severe economic hardship to one or more segments of the industry. I do not necessarily blame

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Building gas load

By W. M. ELMER

President
Independent Natural Gas
Association of America



Home Service theme: Survival of the fit



Speakers at Home Service Round-Up were Mildred R. Clark, left; Bruce A. McCandless; and Mrs. Jessie Cartwright

Survival for the executive in the atomic age may have little to do with megaton bombs and fallout. Instead, it may well depend on fall-in—how well he falls in for push-ups, shoulder shaking and tummy tightening.

This was the theme of a talk, "Survival for the Executive," given by Bonnie Prudden, president of the Institute for Physical Fitness, at the Home Service Breakfast on October 3 during the A. G. A. Convention in Dallas.

Miss Prudden, wearing a black leotard, illustrated her points on physical fitness by performing a series of exercises guaranteed to improve the "corporation" of every executive. The 550 delegates and wives in the audience caught the spirit of the occasion and joined Miss Prudden in some of the less strenuous exercises which she recommends for easing tension. These can all be done while seated at a desk, driving a car or walking from one office to another. Results of the audience participation were frequently hilarious, and laughter filled the huge dining room. Miss Prudden charmed everyone with her agility and wit.

The breakfast opened with greetings from A. G. A.'s managing director, C. S. Stackpole, who introduced the guests at the head table which included Jinx Falkenburg, the gas industry's new First Lady of Television. Mr. Stackpole then turned the microphone over to Mrs. Elsie Alcorn, home service director, Milwaukee Gas Light Company and outgoing chairman of the Home Service Committee.

Mrs. Alcorn introduced outgoing A. G. A. President L. T. Potter, who presented the A. G. A. Home Service Achievement Awards, sponsored by *McCall's* magazine, to five gas industry home service directors. (See awards story, page 11.)

Home Service Round-Up

Several hundred magazine editors, home service directors and sales personnel attended the annual Home Service Round-Up program which followed the Home Service Breakfast during the A. G. A. Convention.

The audience heard three outstanding guest speakers discuss such diversified subjects as home modernization, promotion of commercial cooking equipment and effective selling techniques.

Bruce McCandless, vice president in charge of sales for the Milwaukee Gas

Light Company, was the first speaker. His topic, "How's Your Figure for Remodeling?" dealt with the tremendous market in home modernization.

"I would like to review with you for a few minutes some of the attractive aspects of the home remodeling figures that are available in every community. You home service girls can do a great deal in your own company to stimulate interest, business and profits for your companies by developing the growing market in home remodeling.

"Several factors have contributed to this growth—larger families, the need for larger quarters, a steadily increasing level of spendable income and the desire to enlarge present homes where families have established friends, facilities, churches, schools and transportation. Other families are moving from Suburbia back to town once their families are grown, or they may have had their fill of country life. And there is the potent force in many of our cities of urban renewal. While this effort is focused principally on the commercial areas of our cities, its influence is being felt in some of the older residential areas as well.

"Early this year, the Building Industries Marketing Institute released figures indicating that the full potential in home modernization, improvement and remodeling has not been realized, resulting in a backlog of \$69 billion dollars in potential. This was based upon an estimated current market potential of \$16 billion annually.

"In June of this year, the U.S. Bureau of the Census issued a report giving estimates of expenditures for additions, alterations, maintenance and repairs on residential properties during the year 1960. The conclusion: more than \$13 billion was spent for upkeep and improvement of residential properties. Related to expenditures for new home construction, this compares to \$750 in home improvement for every \$1,000 spent on new home construction, or a ratio of three to four.

"Just what does this mean in your local area and mine? Well, suppose that, in your town of 500,000 population, new home starts total \$50 million. Your estimated potential in total remodeling would be about \$37 million—a considerable volume of business.

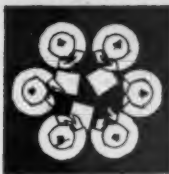
"Our good friends at *American Home* magazine completed a survey based upon responses from 424 of their 755

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GOURMET'S HOLIDAY:
Jonny Best, right, and her all-star cast, above, presented extravaganza of cooking in many styles at luncheon for ladies. Below, head table at the Home Service Breakfast





Industrial relations round table

Prepared by

A. G. A. Personnel Committee

Edited by W. T. Simmons

Assistant Personnel Manager
Philadelphia Electric Co.

● **Wanted: more cheer leaders**—In the March, 1961, issue of *Supervision*, Frank M. Kleiler relates the following story: "Experience: Cheer Leader." Fresh out of high school, she was having a tough time finding a job, and she answered the question on the employment application half jokingly. The man who hired her did so half jokingly, too. "We could use some cheering around here," he said. The people who worked in his small plant were grouchy and uncooperative. So, the youngster went to work as his assistant. She did odd jobs and spread cheer. She complimented people on the work they did and passed the word around when the assembly line of dour old women finally met its quota. She smiled and gave credit where credit was due and generally acted as a cheer leader should. Both morale and production increased at the plant, through the efforts of an eighteen-year-old high school girl.

A good manager performs all the functions of a cheer leader, even though he may not recognize himself as one. He has enthusiasm, and it is contagious. He generates a sense of excitement about ideas, problems, people and work. He is optimistic, even when the score is against him. He focuses appreciation where it will do the most good.

High wages and ideal working conditions do not add up to high production unless that third ingredient—high morale—is added. And that is what cheer leaders are for.

● **Putting failure to work for you**—G. S. Odiorne stated in the May, 1961, issue of *Nation's Business* that even the most successful man sometimes faces personal failure. What makes him a successful man is that he is not crushed by failure; rather, he learns and grows from the experience. What is the secret of making failures pay off? There are four basic rules:

First—Maintain your equilibrium. How serious a mistake have you made? Who else, besides yourself, thinks you have failed? Who else knows about it? In some cases, failure is apparent only to a man himself. In other cases, he may be judged more widely and sternly than he deserves.

Second—Learn from failure. The toughest part of the learning process is seeing failure as opportunity and giving an honest answer to the question: "How much of my failure is due to bad luck and how much to personal inadequacy?"

Third—What you learn is of no value until you convert it into action. Now is the time to take steps to assure yourself that this kind of failure cannot be repeated.

Fourth—Start working at your plan of

action right away, without delay. And stick to it. Failure need not be the end of the world, if you learn how to rebound. In fact, people tend to rally around and support the fellow who shows he can meet disaster by bouncing back.

● **Round-robin hospitality**—"Be my guest," says one supervisor to another at General Motors Corporation, Linden, N. J., and he really means it. No flippant remark, it's all part of a training program to familiarize foremen and general foremen with one another's problems.

Two supervisors, with little or no direct contact on the job, alternate host and guest roles weekly. For one hour, the guest sees his host in action. He discovers different ways to solve common problems. And he can better understand how other functions fit into the total plant activity. Later in the week, the two supervisors exchange roles.

● **Succeed—to health and a long life**—In the September issue of *Today's Health*, John E. Gibson relates that recent statistical research seems to indicate that for good health and a long life, nothing is as successful as success. A variety of studies have produced these findings:

First—Doctors, educators, scientists enjoy the highest prestige in the public's opinion. Educators, lawyers, scientists enjoy the longest life spans. (Explorers and poets have the shortest.)

Second—Persons who achieve the greatest distinction in their chosen profession average much longer life spans than the less eminent. Contrary to general opinion, as men advance to positions of increasing responsibility, their mental and emotional stability increase, together with their capacity to withstand strain. People who continue to exercise their mental muscles increase their mental ability with age.

The prime enemy of success is boredom. Having a job that challenges the capabilities of the individual can be more important than having a super I.Q.; the person of high intelligence who finds himself with a dull job is very likely, in his boredom, to make mistakes and to be generally inefficient.

● **Court decision**—Supreme Court asked to review firm's refusal to reveal insurance plan costs—The National Labor Relations Board makes both a legal and an economic pitch in seeking Supreme Court review of a First Appeals Court ruling that Sylvania Electric Products, Inc., Seneca Falls, N. Y., did not violate the Taft Act in refusing to give a union information on costs of a non-contributory insurance program.

Sylvania gave the Steelworkers Union some information in connection with the program, paid for solely by Sylvania, but

refused to give any information on premium rates and premiums paid.

The Board found the refusal a violation of the Act's bargaining provisions, but the First Appeals Court reversed, deciding that "the long and short of the matter is that what Sylvania paid for its non-contributory group insurance program . . . was neither a wage nor a term or condition of employment," within any generally accepted meaning of the terms."

The contrary view of the Board is that: "As the premiums paid by respondent (Sylvania) constitute wages, it logically follows that the premium cost data requested by the union relates directly to the matter of wages, and, it appearing plain that this data was relevant to the union's task as bargaining agent of respondent's employees within the meaning of the cases (on the subject of what constitutes 'wages'), we conclude that the respondent's refusal to furnish the requested data to the union was violative of Section 8(a)(5) and (1) of the Act, as alleged in the complaint."

The appeals court's opinion stressed that Sylvania, in bargaining with the Steelworkers, did not raise the question of cost in connection with its willingness to discuss proposals for change in the coverage of the insurance program. If cost had been made an issue, the court said, the data requested by the union could have become a bargaining issue since benefits (as distinct from costs) of a non-contributory insurance plan constitute "wages" to employees.

● **NLRB rulings**—Firm's pre-vote raffle not illegal—Contrary to Trial Examiner Arthur E. Reyman, the National Labor Relations Board decides that Austin Concrete Works, Inc., Austin, Texas, did not violate interference bans of the Taft Act when, on the eve of an employee representation election, it notified workers that immediately after the election the company would hold a drawing to give away a television set to some lucky employee.

The examiner found that "the drawing implicitly conveyed a promise of benefit or inducement to vote against the union," thus violating the Act's Section 8(a)(1). The Carpenters Union, which won the election by narrow margin, filed charges against Austin Concrete.

The Board, deciding this conduct was not illegal, says:

"The letter (to employees) announced that the sole purpose of the drawing was to encourage all the employees to vote in the election, and the letter specifically informed the employees that, to win the television set, it did not matter whether they voted for or against the union. In these circumstances, we do not find that this letter interfered with, restrained, or coerced the employees in the exercise of their rights under Section 7 of the Act."

Realism and regulation



By WILLIAM J. MURRAY, JR.
*Chairman
Railroad Commission of Texas*

Let it be acknowledged that it has been a frustrating effort to prepare this presentation. Three different approaches to the subject of realism were discarded because, "You just can't talk about something there ain't any of." During most of the interval between the date when I was asked to appear on your program and today, I have felt that we have moved further away from a realistic approach to regulation of the natural gas industry. Consequently, I have not even wanted to think about this subject, much less adequately prepare myself for the great honor of this occasion. Finally I added the subtitle "There's Gotta Be Hope," because I am inherently an optimist, because I was not willing to appear before this great convention and make a speech of pessimism and failure, and because recently I have seen some signs of hope.

Let me first discuss these hopeful developments and then describe earlier and less favorable events. On September 19 the new chairman of the Federal Power Commission, the Honorable Joseph C. Swidler, delivered an address entitled "New Directions in Gas Regulation" before the Independent Natural Gas Association meeting in Houston, Texas. This was a most significant presentation, and it is hoped that any of you who have not read it will obtain a copy of his address and study it carefully. An editorial in the September 25 *Oil and Gas Journal* states:

"The industry has some reason for encouragement as a result of the speech. . . . Swidler made it clear that he is committed to an effort to make the area-pricing approach succeed. . . . The first major speech of a new FPC chairman is not a sure sign of what lies ahead. But . . . there is cause for hope."

Last week at the annual convention of the National Association of Railroad and Utilities Commissioners meeting in Atlantic City, New Jersey, a brief verbal report was delivered by the "Special Committee to Study Natural Gas Rate Problems" which is believed to offer hope that NARUC is now prepared to take a more realistic approach and will seek to work with industry groups as well as consumer groups in preparing legislative proposals.

The final basis for hope is the report that a task force composed of representatives of all segments of the natural gas industry is making real progress towards

resolving conflicting views and is available for conferences with representatives of NARUC, federal and state regulatory bodies, and various consumer groups in the belief that these conferences will produce better understanding and joint support of the type of legislation which might be found to be needed.

It might be concluded that this should be the end of my speech as well as the beginning and that all you need do is hopefully await developments. But you should be warned equally against complacent optimism and resigned nothing-can-be-done pessimism. Each of you will need to take action and, therefore, you will need more background information.

First let me identify your speaker. I grew up in the early boom oil and gas fields, the son of a rig-building father, received my degrees in petroleum engineering, taught at The University of Texas, and have been employed by independent oil and gas producers and by state and federal petroleum conservation agencies. I am currently privileged to serve as chairman of the Railroad Commission of Texas, which, in addition to regulating public transportation, is both the conservation agency which regulates oil and gas production and the utility agency which regulates the distribution and domestic sale of natural gas.

My field of specialization is conservation in the production of oil and natural gas, I chaired the Gas Conservation Engineering Committee which studied with gratifying results the problem of casinghead gas utilization, and I presently chair the Texas Petroleum Research Committee which conducts a program of research and sponsors periodic oil recovery conferences seeking to improve efficiency of recovery.

Thus, if a discussion of realistic conservation regulation in the production of oil and natural gas had been desired, presumably my training and experience might have rendered me reasonably competent to cover the subject. But what was desired was a discussion of realism, present and prospective, in federal administration of the Natural Gas Act as interpreted in the Phillips and other court decisions. This is an area in which I do not claim to be an authority and in which I would prefer not to become involved. But possibly the reason for inviting me was because of the breadth, if not depth, of my experience, and because the Railroad Commission of

An address delivered at the American Gas Association Convention, Dallas, October 1961.

Texas is one of the few regulatory agencies in the nation which both has responsibility for conservation regulations to assure adequate supplies of oil and natural gas for the future and utility regulations to assure the consumer of dependable service at reasonable prices.

Because of the hybrid nature of our regulatory agency, the existence and adverse effect of unrealistic regulation becomes more quickly apparent than to other regulatory agencies whose responsibilities are more specialized. We recognize that most domestic consumers of natural gas are captive to the utility which supplies them, and which is usually a monopoly either for legal or economic reasons.

Alternate competitive fuel supplies are rarely conveniently available to these domestic consumers. They could be subject to abuse by the utility which supplies them if they were not protected by a city, state or federal regulatory authority.

But even though we are a utility commission and share the zeal of our colleagues in other states for winning public approval by obtaining every possible rate reduction and opposing and delaying all requested rate increases, our experience as a conservation body has taught us that we must think of the future as well as the present welfare of consumers, and that, unless we curb our sometime shortsighted zeal as a utility commission, we may dry up the sources of supply and consequently harm the consumers of the future.

Gas Act upset

Now to present the background of federal regulation of natural gas.

Part of this is an old story to you, but for the sake of completeness it will need to be briefly restated. The Natural Gas Act was originally intended to close the regulatory gap existing between the state regulatory bodies of producing and consuming states. The Texas Railroad Commission, being both a conservation and utility commission, early recognized the existence of this gap for interstate movements of gas, favored the passage of the Natural Gas Act, and for many years worked in close harmony with the Federal Power Commission in its administration of the provisions of the Act.

It was our opinion that the existence of the Act and the consequent cooperation between state and federal regulatory bodies helped bring about the pre-

vention of physical waste, the attainment of ratable take, the development of additional reserves, the construction of gathering and transportation facilities, the extension of distribution facilities and the assurance of dependable service and reasonable price to the consumer.

But in the Phillips and subsequent cases, the Supreme Court overturned the practice and pronouncements of the Federal Power Commission for the previous sixteen years and held that the FPC must fix the price at the wellhead for gas which moves into interstate commerce.

It is useless to continue further the debate as to whether or not this was a wise decision. The important fact is that field price regulation decreed by the court and, therefore, now the law of the land, was not intended by Congress when it passed the Natural Gas Act and, consequently, no standards or guides for such regulation were included in the Act. With the resultant, inevitable confusion and delay you are unfortunately well acquainted. You also know the story about attempted clarifying legislation and its veto.

But a more recent development about which you may not be fully informed began in 1959 at the annual convention of the National Association of Railroad and Utilities Commissioners. This association has at least one member Commission and several Commissioner representatives from each of the fifty states and, therefore, has broad representation and considerable influence. At this convention it was stated that there currently existed an unrealistic approach by the FPC to regulation of the natural gas industry, that there was a hopeless logjam of pending cases, and that at the current rate of progress it would require some sixty-five years to dispose of the cases already filed. Consequently, a resolution was passed instructing that a committee be appointed to study and recommend appropriate amendments to the Natural Gas Act. Your speaker served on the eleven-man committee and on a five-man subcommittee which drafted the committee report.

The 1960 NARUC convention adopted a report favored by a majority of the committee which recommended legislation amending the Natural Gas Act in certain areas; but, on the problem of producer regulation, it recommended that the committee continue its study

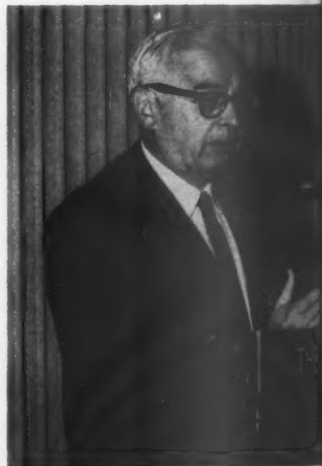
(Continued on page 41)



L. J. Fretwell, retiring chairman of Industrial and Commercial Section



W. E. McWilliams, W. D. Reim, new Residential Section officer



J. J. McKearin, retiring chairman of the Residential Section



Fred Klemp and Herbert True, above, preached old fashioned sell-fire and brimstone sales religion

'Revival' sets sales a-poppin'

In a unique, two-hour presentation featuring Dr. Herbert True (Mr. Creativity) and Fred Klemp (Mr. Practicality), the Residential and Industrial-Commercial Sections staged an old-fashioned sales revival in a packed ballroom on Monday afternoon at the A. G. A. Convention.

Music, humor and inspirational selling tips highlighted this rapid-fire program. Speaking alternately in a continuous performance, Messrs. True and Klemp emphasized that this is a time for "daring and doing" in persuasive salesmanship.

Random samples of their message:

All enterprises begin with an idea and fail when they quit having ideas. . . . Everything you say and do, plus

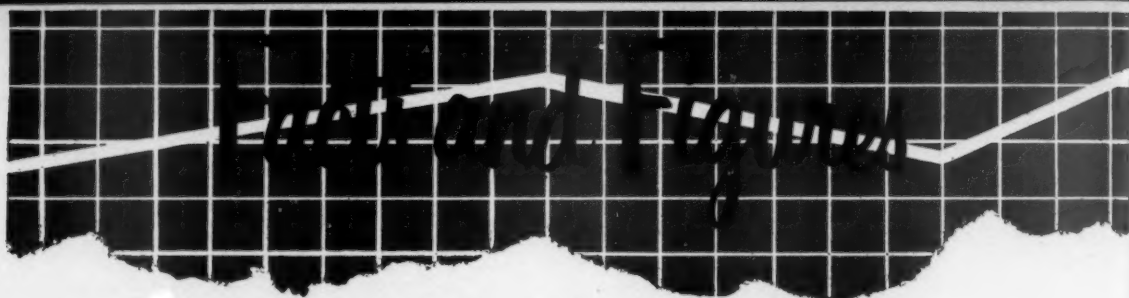
the customer's reaction, is what makes the sale. . . . You've got to prospect to make sales. . . . More sales are lost in the first sentence than are made in the next 15 minutes. . . . Instead of worrying about competition, make the most of what you've got. . . . 85 per cent of today's salesmen sell by accident while the others succeed by spelling out benefits to the customer. . . . When meeting sales resistance, don't overlook the opportunity to say "I'm glad you brought that up." . . . 42 per cent of salesmen make only one attempt to sell, then give up. . . . When trying to make a sale, always be on the verge of closing the deal.

Dr. True is vice president of Visual Research, Inc., and a former professor

of marketing at Notre Dame University. Fred Klemp is president of his own sales training organization.

Earlier in the day, the Residential Section elected Frank J. McLaughlin, vice president, Providence Gas Company, as its 1962 chairman. Named to head the Industrial-Commercial Section was W. D. Relyea, assistant manager, industrial and commercial sales, Public Service Electric and Gas Company.

New vice chairman, Industrial-Commercial Section, is Walter E. McWilliams, assistant sales manager, The Peoples Natural Gas Company. Vice chairman of the Residential Section for the coming year is James Condon, assistant vice president, The Peoples Gas Light and Coke Company.



Prepared by A. G. A. Bureau of Statistics

For the 12-month period ending August 31, 1961, utility gas sales to ultimate consumers totaled 91,288 million therms, an increase of nearly 2 per cent over the preceding 12 months. Industrial gas sales represented over half of the total although registering a loss of less than 1 per cent compared to the preceding year, while sales to residential, commercial and other customers showed a gain of 3.8 per cent for the period.

Total utility sales of gas to ultimate consumers amounted to 5,593 million therms in August, 1961, a decline of less than one per cent. Residential, commercial and other customers, however, used 7 per cent more gas in August, 1961, registering 1,534 million therms. About a third of this gain can be explained by the increase in number of customers. But a significant portion must be attributed to the growing utilization of base load and summer load appliances, primarily water heaters, but also, perhaps, incinerators, gas lights, refrigerators and air conditioners.

New housing activity reversed its upward trend and showed a decline for the month of August. August, 1961, non-farm housing starts of 126,300 are 5.0 per cent lower than the same month last year. The rise in the average construction costs of new homes and activity in the non-residential segment of the building industry remained vigorous, however, with total dollar value of new private construction rising moderately from last year's 5.0 per cent.

Although there were shutdowns because of vacations for periods ranging from one to four weeks, appliance shipment figures registered only minor decreases. As an indication of the brightening future portended for the gas industry, the Gas Appliance Manufacturers Association reports manufacturer shipments of gas ranges gained 12.3 per cent over the same month last year, and for the first time in well over a year gas dryers registered a whopping increase of 22.0 per cent.

SALES OF GAS AND ELECTRIC RESIDENTIAL APPLIANCES DURING AUGUST, 1961

(WITH PER CENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	August		July		First 8 Months, 1961	
	Units	Per Cent Change	Units	Per Cent Change	Units	Per Cent Change
RANGES (including built-ins)						
Gas	182,900	+12.3	114,400	+ 8.2	1,152,400	- 4.3
Electric			104,000	+ 1.1		
WATER HEATERS						
Gas	206,200	-26.2	169,200	-33.4	1,741,000	- 7.8
Electric			59,400	- 0.3		
GAS HEATING—Total	127,172	- 1.7	103,467	+ 7.8	726,918	- 0.0
Furnaces	94,500	- 2.5	79,700	+ 6.6	570,300	+ 0.7
Boilers	18,072	+ 9.9	13,167	+12.7	91,918	+ 6.8
Conversion Burners	14,600	- 8.8	10,600	+11.6	64,700	-13.2
OIL-FIRED BURNER INSTALLATIONS			36,722	+ 5.5		
DRYERS						
Gas	43,331	+22.0	22,234	N/C	204,155	-10.0
Electric	79,015	+13.0	42,639	- 2.0	399,124	- 8.0

Sources: Gas Appliance Manufacturers Association, National Electrical Manufacturers Association, "Fueloil and Oil Heat," and American Home Laundry Manufacturers' Association.

GAS SALES TO ULTIMATE CONSUMERS BY UTILITIES AND PIPELINES DURING AUGUST, 1961

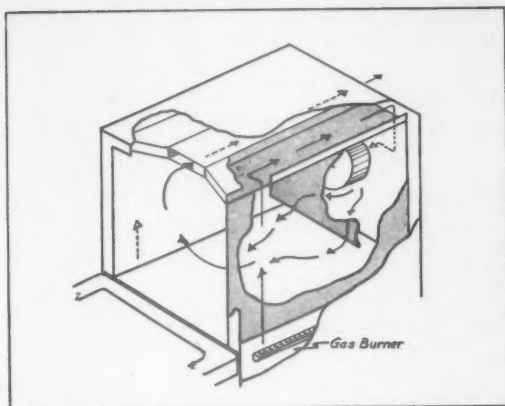
(MILLIONS OF THERMS)

	Month of August			Twelve Months Ending August 31		
	1961	1960	Per Cent Change	1961	1960	Per Cent Change
Natural gas	5,506.0	5,522.0	-0.3	91,288.0	89,809.5	+1.6
Manufactured and mixed gas	87.4	94.4	-7.4	2,307.9	2,300.6	+0.3
Total gas	5,593.4	5,616.4	-0.4	93,595.9	92,110.1	+1.6
Residential, commercial and other	1,534.2	1,432.3	+7.1	47,124.0	45,406.6	+3.8
Industrial	4,059.2	4,184.1	-3.0	46,471.9	46,703.5	-0.5
August Indices (1947-1949 = 100)						
Total gas sales (A. G. A.)	258.3	259.4	-0.4			
Residential, commercial and other (A. G. A.)	272.6	254.5	+7.1			
Industrial (A. G. A.)	253.3	261.1	-3.0			

PERTINENT BUSINESS INDICATORS, AUGUST, 1961

(WITH PER CENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	August			July		
	1961	1960	Per Cent Change	1961	1960	Per Cent Change
Industrial activity, FRB (1947-49 = 100)	171	163	+3.6	174	166	+4.8
Consumer prices (1947-49 = 100)	128.0	126.6	+1.1	128.1	126.6	+1.2
Housing starts, non-farm (thousands)	126.3	133.0	-5.0	125.5	116.6	+7.6
New private construction expenditures (\$ million)	3,727	3,556	+5.0	3,746	3,660	+2.3



Above, cutaway view of the oven.
Right, co-author Honaker points
to fan for agitating atmosphere



Experimental oven speeds baking

By H. L. McPHERSON

American Gas Association
Laboratories
Cleveland, Ohio

An experimental oven design, which uses less gas and has one-third less heat losses to the surrounding area than conventional ovens, is described in a new research publication. This experimental oven, developed by the A. G. A. Laboratories, includes a fan to agitate the oven atmosphere. It will bake four cakes, eight inches in diameter, in about two-thirds the normal time required by conventional designs.

Complete details of this experimental domestic oven, together with other design criteria for minimizing appliance heat losses to domestic kitchens, are discussed in A. G. A. Laboratories Research Bulletin 89, "An Evaluation of the Various Methods for Attaining Cooler Domestic Gas Kitchens," by L. A. Nead and B. G. Honaker, Jr. The

bulletin summarizes research performed under the Association's PAR Project DA-6-C sponsored by the Committee on Domestic Gas Research. It includes evaluations for cooking with deep wells, high primary aerated burners and conventional burners operated at maximum input ratings of between 4,000 and 6,000 Btu per hour with the burners raised closer to the grates.

With the growth in summer air conditioning, appliance designers are directing their attention to the heat losses from kitchen appliances to the surrounding area. Such household appliances as the washer, dryer, water heater, incinerator, range and others release heat during operation regardless of the type of energy used. It is estimated that the larger portion of the heat released to the kitchen atmosphere by the various types of appliances results from operation of the range and refrigerator. Since operation of a refrigerator provides a fairly continuous source of heat in varying amounts to the kitchen, vent-

ing or "ventilating" the unit outdoors seems to be the most direct method of eliminating this heat.

It was believed that heat losses to the kitchen from gas ranges could be minimized by a re-evaluation of the methods of cooking, equipment design and utensils employed. An alternate approach discussed in the bulletin involves a system of adequate air supply and ventilation to remove the undesired heat to the outdoors with the least disturbance to the household air conditioning.

Since heat not used in the cooking process represents heat gains to the kitchen atmosphere, a reduction in these heat losses from a domestic gas range can best be achieved by thermostatic control of top-burner operations. Thermostatic burner control offers a direct and proven approach to reducing range top-burner heat losses. For example, tests by the A. G. A. Laboratories with diced boiled potatoes indicate that as much as 1,000 Btu can be saved in cooking roughly 1.5 pounds of pota-

toes with an equal amount of water. A further reduction in the heat losses from a domestic gas range appears feasible by the expedient of reducing the top-burner maximum input rate to between 4,000 and 6,000 Btu per hour. This would be accompanied by a sacrifice in cooking speed, however.

Other expedients to decrease heat gains to the kitchen would be (a) to replace standard top grates with solid top plates and to exhaust the waste heat and combustion products either by gravity action or forced venting to the outside, (b) to employ a radiant type burner, which in essence represents another form of solid top cooking, or (c) to adopt one hundred per cent primary aerated burners which give standard thermal efficiencies as high as 85 per cent at rated inputs of around 5,000 Btu per hour.

Standardization and "optimum matching" of utensils with top burners would also contribute to more effective utilization of heat. Wherever possible, utensils should be used with "steam-seal" covers to reduce water evaporation heat losses.

In conventional gas range top-burner cookery, the load is heated by means of heat transfer from the hot combustion products produced by the top burner to the utensil containing the load. The effectiveness of this transfer is in part governed by how close the hot gases "hug" the utensil. From this standpoint, grate fingers should be radially dispersed from the center of the utensil

or heat source so as to produce the least disturbance to the natural hot gas flow on the bottoms and sides of the utensil. Likewise, the width and thickness of the grate fingers can also adversely affect convectional flow pattern and should be minimized.

Also of importance in the efficiency of heat transfer from the flue gases to the utensil is the vertical height of the grate above the burner. For maximum efficiency, the grate-to-burner spacing should be kept to a minimum consistent with satisfactory combustion of the gas. Increased efficiency at turndown rates might be achieved through a mechanical control for automatically adjusting the vertical position of the top-burner ports in reference to the grate level without affecting combustion efficiency. This control would automatically raise and lower the burner or its head as the input rate is decreased or increased, respectively. Thus, the burner port-to-grate distance would be adjusted automatically to yield maximum efficiency with satisfactory combustion for any given input rate.

Another mechanical arrangement to improve thermal efficiency might be a weight sensing device to control the burner input rate. Simply, the lighter the cooking load, the lower the maximum input rate would be; and, conversely, the heavier the cooking load, the higher the maximum input rate would be.

Use of mechanical devices to vary the grate-to-burner port spacing or the top-

burner input rate with cooking load, would add to the cost and complexity of the burner system and would require further experimental work to evaluate any actual improvements that might be expected.

Application of high temperature radiant heat for both broiling and baking has proved successful during studies by the Laboratories under PAR Project DA-5-C, "Study of Domestic Range Broilers and Ovens." Experiments with an open-type design using radiant heat indicated a substantial savings in baking time as compared with conventional ovens. In the Laboratories experimental open-type oven, two yellow layer cakes are baked in 12 minutes with a fuel consumption of approximately 4,600 Btu. Conventional equipment would require about 24 minutes baking time for yellow layer cakes.

Agitation of the oven atmosphere of enclosed baking compartments will likewise reduce baking time for yellow layer cakes and with a minimum of fuel consumption. Application of this forced convection principle has been applied successfully by the Laboratories to commercial-type deck bake ovens. Research under this project indicates that the forced convection principles can likewise be applied successfully to domestic-type ovens.

Using the forced convection principle, an experimental domestic oven developed through this research by the A. G. A. Laboratories reduced the total gas consumption for various baking and roasting operations by 23 to 42 per cent. This reduced gas consumption is in the order of 1,900 to 2,750 Btu and represents heat that might otherwise be lost to the surrounding atmosphere.

The aim of this research, as discussed briefly in this article, has been to study various methods for minimizing the heat losses from domestic gas ranges in order to provide cooler kitchens during cooking operations.

For a complete summary of the work performed and for suggestions derived from this research, A. G. A. Laboratories Research Bulletin 89, "An Evaluation of the Various Methods for Attaining Cooler Domestic Gas Kitchens," should be reviewed. Copies are available for \$2.50 each from the A. G. A. Laboratories, 1032 East 62nd Street, Cleveland 3, Ohio or the Association (A. G. A. Catalog No. 144/DR).

Hurricane is no match for gas lamp



Water was four feet deep in Houston, Texas, and the town was practically deserted during the fury of Hurricane Carla, but natural gas stayed on the job. A reporter for the "Houston Chronicle" took this photograph and Houston Natural Gas System used it in ads featuring the word "dependability"

this on the President himself. I do believe that there are many people in our Congress and within our regulatory agencies, both state and federal, who feel that we have an anti-business administration; and because of this feeling they have taken it upon themselves to enact regulations or legislation to stop these unpopular practices of the gas companies and, in effect, to help the consuming public.

It is natural that the press has published this proposed legislation, and from many segments of the country editorialized the so-called bad practices of the industry in continually trying to gouge the public so that all the producers in Texas could continue to drive Cadillacs; so that the pipelines could raise money for construction programs in the form of excess rates; and so the distributor could continue to have a highly profitable operation.

The attack upon our reputation has moved to the investor, and already many companies in the producer and pipeline segments are beginning to suffer materially from a financial reputation standpoint. This has not yet hit many of the distribution companies, but I am sure this will follow unless we do something to remedy the situation.

Let me give you a few examples. First, all of you know what has happened to the selling price of the bulk of the producing company stocks in comparison to other industry. True, the oil import problem, the world's oversupply of oil, have had some effect on this problem, but it has also been intensified by the severe problems faced by the producer relative to regulation of gas sold in interstate commerce.

If you follow, which I am sure most of you do, periodic reports issued by investment banking and investment counseling firms, you will have noticed in recent months that most of them are very derogatory as to the advisability of further investment in several of the pipeline securities as compared with those of other industries. Not long ago one of these releases crossed my desk from a major investment banking firm, actually recommending that their customers switch from pipeline stocks to those of other industry.

You may have noticed a few weeks ago—I believe it was the September 1 issue of *Forbes* magazine—an article

which was headed, "The pipeline outfits were long Wall Street's favorites among the gas companies. But now the tables have turned." It went on to show how this attitude on the part of the investor was affecting the construction programs of the pipelines, and reported that since it had first announced its 1961-63 estimates last fall, A. G. A. had already pared some \$400 million from its estimates for spending on new pipelines.

As I stated, the distribution companies have not yet felt the effect of this feeling on the part of the investing public which is already taking its toll on the fund-raising ability of the producing and pipeline segments of our industry. Recommendations are still good as to the investment in distribution securities. In fact, the article I referred to stated that the investors' interests were turning from the pipeline to the distribution security. But we are one industry, and the more the producers and pipelines are hurt in the minds of the investor, the closer will come the time when the distributor will join this same group.

Public opinion

Why does this situation exist as it does today? First, let's look at the producer. As we all know too well, too many of the general public look at the producer solely in one category; that is, that of a rich Texan lighting his cigars with hundred dollar bills which he obtains through tax benefits of depletion or from unjustly gouging the public with extremely high and unfair rates for natural gas that he produces and sells in interstate commerce. John Public has not dreamed this up by himself. You in the distribution segment, and some of us in the pipeline segment, are very guilty of having helped bring this feeling to the public, to the press, to the regulatory agencies and to the Congress.

Let's look back and see what has really happened. For many, many years both the distribution and pipeline segments of the industry have been subject to very strict regulation, either state or federal. We had learned to live with it. It offered us many problems, but we recognized regulatory problems and tried to conduct our business in the best possible way for our stockholders and our customers, and to comply with the rules and regulations of the regulatory authorities. It took us a long time to do

this. The distributor got used to it first. Then, in 1938, the pipeline was subjected to the same treatment, and it took pipeline management a long time to get used to operating as a regulated company.

What about the producer? He was told that he was not a natural gas company and carried on his business on that basis.

Producers suddenly regulated

Then, all of a sudden, on one June morning in 1954, he woke up to find himself not only declared to be subject to the regulation of the Natural Gas Act, but to be subject to a type of regulation that every intelligent producer knew was entirely unworkable.

As you know, little has been done by the producing industry to work out a workable method of producer regulation. The producer has been working in the dark. This was an entirely new problem to him—one that we expected him to fully understand solely because we had been living with the problem for many years.

He has been fighting to protect his interests, as the rest of us would have to protect our own. Most of the producers are subject to 5(a) investigations, but, at the same time, they had to continue to drill for and discover gas to maintain reserves for our growing needs.

Prior to the June, 1954, date, the producer in south Louisiana, for example, had sold gas in interstate commerce for 20 cents a thousand cubic feet. Gas was being delivered to the consumer in the north. Drilling costs were going up; deeper drilling was necessary; and the producer felt, as you or I would have felt, that he was entitled to at least that price for new gas in south Louisiana. They had contracts that provided, for example, that once each five years their price would be adjusted to the going price in the area. They had always lived under contracts and felt that they were legally entitled to such prices. Now, they found themselves not only faced with a regulatory agency but could not operate effectively because there had been foisted upon it by the courts an unworkable method of such regulation, but they found themselves opposed, in case after case, by the distribution and pipeline companies in an attack on their prices—even on the price level that had been charged and certificated prior to the June, 1954, date.

I am not saying that the rest of the industry should have sat back and said, "Producer, charge whatever you want. We will pay it and pass it on to the consumer." On the other hand, I thoroughly believe that many in the industry have been and are continuing to be very unfair in their positions towards the producer, upon whom we all rely for the future gas supplies of this country.

Representatives of the other two segments have taken positions that 17 cents is an adequate price for gas in south Louisiana, or 18 cents, or some at an even lower figure. I would venture to guess that very, very few of the representatives of the other segments who have taken this position, through Commission hearings and on into the courts of the United States, have ever had any real experience in the risks and heartaches involved in exploring for and producing natural gas.

Approaches to regulation

The Federal Power Commission last year, in a decision relating to Phillips Petroleum Company, admitted that it could not regulate the producer under the utility-type regulation prescribed by the Supreme Court. Efforts are now being made by the Commission to find some other way of doing the job. One approach is a type of regulation by area prices, which should be workable.

At the recent annual meeting of the Independent Natural Gas Association of America, in the principal address, Chairman Swidler of the Federal Power Commission endorsed this area price approach, and I am sure that he and the new commissioners will make a real honest attempt to see that it works.

There may be some question as to its legality. Chairman Swidler thinks that it is legal, and I agree with him.

Several distributors, some state commissions, and a few producers are already fighting this method.

A workable method can be arrived at. The time to do it is now, and I plead with all of you to spend some real constructive efforts on trying to understand the producer's problem and work out this situation on a basis whereby the producer can continue, on a profitable basis, to develop gas supplies for us, rather than carry on fight after fight before the regulatory agencies and the courts for some arbitrary position.

We need to work with our state regulatory authorities to try to have them

understand the problem of the producer, rather than to take the position, as many have, that the producer overcharges for his production; that he can be regulated on the utility-type basis, and they are going to see that it is done. It is this position on the part of state regulatory bodies that migrates to the legislative representatives of those states, and through the press to the public, that creates a very unjust opinion in their minds as to the producer.

Investment outlook sour

Let me turn a minute to the pipelines, and go back to the problem they are facing in the investment circles today. The investor generally is sour on many pipeline securities. For the past five quarters there has been a major decrease each quarter in the holdings of pipeline securities by investment companies in this country. This is continuing. It has happened because the pipelines have been the target of regulatory changes and legislative attempts, the result of all of which would be to decrease the earnings available to the stockholders of the pipeline companies. This, almost without exception, again stems from the continual flood of rate increase applications on the part of the pipeline industry. Why have these rate increases been filed? Gentlemen, almost without exception it has been necessary for the pipelines to ask for increased rates in order to absorb the cost of new or replacement gas to meet the needs of the distributor and the consumer—not necessarily because the producer has arbitrarily fixed a higher price, but because it is costing more to drill deeper; to go offshore; and the cost of gathering gas, particularly in the offshore areas, has mounted rapidly.

The Federal Power Commission, in handling these rate increase applications, has, in accordance with its obligations, attempted to keep the increases to the distributor as low as possible. But, in doing so, it has cut the revenues of the pipelines to the bare bones, and, on the disposition of each rate increase application, a little more is taken out of the pipeline stockholder's pockets.

Our sales are up; our volumes are up; our expansions are greater—that is, up until recently; but our earnings are down—that is, for those companies that know what they are making.

All the pipelines need to hold their heads up again in the investment world

is fair treatment in the disposition of their rate cases.

But I do believe that the pipelines need the help and cooperation of the distribution industry in order to attain this end.

We cannot forget the consumer because, if we are going to build load, we must have a satisfied consumer, and all of us know that the continual increase in rates has been a real problem to us in obtaining this respect. All three segments of the industry are faced with continual rises in cost—labor, materials, and, in the case of the producer, the necessity for deeper and deeper exploration.

We cannot absorb these, and eventually will have to pass them on in our rates as long as we can competitively do so. But we should work together to find a way to minimize the number of rate filings of all three segments.

I believe the most important objective that the industry can attain in regaining consumer support and respect is stability of rates—not necessarily rate level, but stability. There are very few segments of this country that could not stand higher gas rates today, particularly for residential use. True, some house-heating load may be lost to electric heat in TVA areas. True, some boiler fuel loads may be lost to coal. Frankly, I think that the bulk of the boiler fuel load will be lost to coal, solely on a competitive basis, anyway. It has happened already in a substantial part of this country, and I think it will happen in additional states, including some of the gas-producing states.

So, rate level to me is not nearly as important—that is, the present rate level—as is the necessity for us to arrive at a proper rate level and then keep stability in those rates.

If the regulatory agency regulating the producer could arrive at a reasonable rate with which the producer could live—not in the past but in the present and foreseeable future—then get the support of the other segments of the industry in the adoption of such rates, I am sure we would be well on our way in the stabilization of the field price of gas.

Let's quit spending all of our time fighting each other, and spend a little more time working together to try to regain the respect and reputation that we are losing so rapidly. This is a form of load building that I think is a must.

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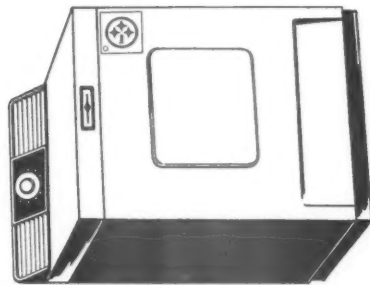
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Accountants swing to automation

The Accounting Section, retiring Chairman Reinhold H. Johnson presiding, held two afternoon sessions during the A. G. A. Convention to elect officers for the coming year, present awards for outstanding accomplishment and hear addresses on accounting topics of immediate interest.

Elected to succeed Mr. Johnson as Section chairman was Arthur Skelton, general superintendent, accounts division, The Peoples Gas Light & Coke Company. New vice chairman is Albert J. Klemmer, auditor, Rochester Gas & Electric Corporation.

Accounting Merit awards were presented by A. G. A. President Lester T. Potter (see awards story, page 11).

Subjects of keen interest to utility accountants covered by speakers included automation through use of computers, automatic meter reading, work simplification and corporate federal income taxes.

At the first session, on Monday afternoon, A. J. Brodtmann, New Orleans Public Service Inc., and J. P. Bromley, Consumers Power Company, both described computer projects and experience at their own companies.

Mr. Brodtmann, in his talk entitled "The 1401 Computer at New Orleans," evaluated favorably rented equipment being used by New Orleans Public Service, and gave a step-by-step technical analysis of the data processing system installed.

Mr. Bromley, in "Computer Roles and Goals at Consumers Power," discussed some of the management thinking behind his company's moves to automate accounting functions.

Consumers Power's approach, said Mr. Bromley, was strictly one of economics, since the company had no especial desire to be a pioneer in the field.



R. H. Johnson, outgoing chairman, Accounting Section, passes gavel to A. H. Skelton, right, new chairman. A. J. Klemmer, vice chairman, looks on



Speakers at Monday Accounting meeting, left to right, were: J. P. Bromley; R. H. Johnson; C. D. Osterholm; and A. J. Brodtmann

Computer equipment is made a more attractive investment, Mr. Bromley reported, by the fact that it can be used for engineering, research and statistical projects, as well as for accounting work. In fact, he described the use of computers as "open-ended."

The continued rise in labor costs also operates to make computers an increasingly attractive investment, since savings in these costs constitute the principal advantage of the electronic devices. For many operations, Mr. Bromley said, the cost curves for human labor and for computers have not yet crossed, so that in these areas the question of replacing people with machines has not yet arisen.

Mr. Bromley admitted that use of automating equipment such as computers has a definite effect on personnel.

to become supervisors of machines, with quite different tasks. However, Mr. Bromley reported that in every case this adjustment was made satisfactorily.

Mr. Bromley concluded with an optimistic forecast for the use of computers, exhorting accountants to be alert in recognizing the many potential opportunities for use of electronic data processing equipment.

The last speaker on the Monday program was Carl D. Osterholm, Northern Natural Gas Company, who changed his original title from "Distribution of Consolidated Federal Income Taxes" to "Computation of Income Taxes of Individual Companies Entering into a Consolidated Federal Income Tax Return." The latter title described his subject more accurately.

therefore requires critical examination."

Mr. Osterholm discussed several court cases in which the issue had arisen.

In conclusion, he stated:

"The Internal Revenue Code specifies that a company incurring a loss may obtain tax relief by either the carry-forward or carry-back provisions, or if it is included in a family of corporations, it may offset its loss against income from other members of the family. It is a distortion to conclude in this latter method that the matching of the loss of one company for tax purposes reduces the income of the profit company.

"The device to reduce regulated costs and rates results in depriving the companies of one of the methods of tax relief specified by the Internal Revenue Code, since the relief is not given to the loss company but to the customers of the profit company.

"Serious thought needs to be given to accounting practices and rate making practices used in computing individual income taxes of members of the consolidated group."

On Tuesday afternoon, E. J. Howe, president, Rochester Gas & Electric Corporation, opened the session with "Work Simplification."

Though this phrase is the one generally in use, Mr. Howe said his company prefers the term "Job Management."

The need for Job Management or Work Simplification as a deliberate tool of company managers is a result of the expansion of administrative activities which follows every technical advance. This field of endeavor began as time and motion study, which it still includes, but now includes many other factors.

Mr. Howe enumerated four phases of job management:

Methods—Formulation of improved procedures.

Installation—Putting improved methods into effect.

Resistance—Forestalling or overcoming resistance to change by personnel.

Maintenance—Retention of improvements.

Evolving of new methods was once considered the principal problem. However, experience showed that human relations involved in getting changes accepted constitute an even larger problem. Therefore, emphasis has shifted, Mr. Howe said, to this aspect of job

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Tuesday speakers:
Arthur Skelton, R. H.
Johnson (seated);
A. J. Klemmer, H. L.
Walworth, W. D.
Sweetman, E. J. Howe

Nevertheless, he said, the better (more economical) way will be adopted, even though it causes temporary displacements. Since the process is inevitable, people's attitudes toward automation must change, and they must be brought to better understanding of it.

At Consumers Power, Mr. Bromley reported, the change-over to computers was made nearly painless to personnel by the company's employment policies. During the period of transition to machines, employees were hired only on a temporary and conditional basis. Combined with natural attrition, this policy made it unnecessary to lay off any permanent employees when the work force later was reduced.

A different problem was encountered in that former supervisors of people had

"The problem of determination of proper income taxes for individual companies rendering a consolidated income tax return, where one or more members are loss companies, has become one of extreme importance in the rate making procedure," Mr. Osterholm said.

"In recent rate making proceedings where this problem has existed, the Federal Power Commission staff has taken the position that consolidated income taxes would be allocated to those companies in the consolidation which have a gain. They do not recognize the tax credit contributed by loss companies in the consolidation, even though the loss companies may engage in non-regulated business. This treatment, when applied in rate making procedures, produces incongruous and inequitable results, and

At right, outgoing Section Chairman G. C. Griswold receives gavel from Vice Chairman D. B. Beecher



Above, Dr. Willis M. Tate (Inset) addresses General Management Luncheon

Business needs 'men of big minds'

American business will have to look increasingly to institutions of higher education for help in solving the difficult problems of the future, Convention speakers agreed.

General John B. Medaris, addressing the Convention general session, told delegates that only such institutions can provide the scope and quality of research that will be required.

Dr. Willis M. Tate, president of Southern Methodist University, told members attending the General Management Section luncheon that business must also look to the colleges and universities to give its future leaders the

thinking capacity, stability and breadth of mind that will be necessary in a challenging and fast-changing world.

Dr. Tate's address followed a ceremony during which retiring Chairman Gordon C. Griswold, presiding, introduced and received a gavel from the Section's new vice chairman, Donald B. Beecher, president, Equitable Gas Company. New chairman of the General Management Section is William B. Tippy, president, Commonwealth Services, Inc.

Speaking on "The Power of Eternal Values," Dr. Tate said:

"Since a well-known date in October,

1957, some four years ago, everyone has been made aware that we live in a fast-changing world. On that date the first space satellite was launched. A number of responsible people have said that this date is the most important date we will know in this century.

"Of course, our world has been changing rapidly since the end of World War II, but it took a man-made satellite to dramatize this change and to make us aware of it.

"Actually, a number of things have happened within the past fifteen years, any one of which was significant enough to jar an entire century of time. You

know them: the coming of atomic power; the frontier of outer space; the invention of the transistor; mass communications and the jet age, to name only a few. Each one of these great scientific and technological breakthroughs has brought with it accompanying social, economic and political changes of gigantic proportions. Life has speeded up. Jet flights are getting faster and faster. Some of you may have experienced what I hear is true—that it is possible for us to take in a show in London and get to New York in time to spend the night! Things are now so fast and so speeded up that it is difficult for us to comprehend. Yet this is just the beginning."

As a result of such rapid change, Dr. Tate said, "The tasks faced by leaders today, which rise out of the economic and social roles which business and industry play in American life, are of a magnitude that cannot even properly be grasped, let alone successfully dealt with except by men with big minds."

"It is in the social implications of today's rapidly changing world that the bigness of mind and spirit are most urgently needed. Leaders of our society today must be at home in areas of knowledge which enlarge the understanding and deepen insights in regard to men themselves and men in their social relationships. These leaders must have the capacity successfully to deal

with those abstract ideas which illuminate the world and which allow man to control more wisely the world in which he lives."

Dr. Tate reported that more and more business organizations are turning to the colleges and universities to give their executives training in basic disciplines—even in the middle of the executives' careers. However, he added, such brief exposures cannot create the required "bigness of mind" unless they build on a foundation laid years before by education.

How is education itself responding to the challenge of rapid change?

"Higher education especially is in a critical position in our society today. With the rapidly increasing birthrate, we have more and more students; the breakthrough in knowledge requires that these same students spend more and more years in school; advanced degrees are now not the unusual but the expected in many fields; these experts whom we are educating require a specialized curriculum; the equipment and physical facilities required for such a curriculum are expensive; the shortage of top-flight men has created a competition between business and our universities, resulting in much higher salaries required."

As a solution, Dr. Tate rejected federal aid to higher education. Instead, he said, "We must have support for

higher education, and that support must come from private sources. That support is coming. Every year, more and more corporations, businesses and industries are seeing their responsibility toward higher education."

To discharge its own responsibility, education must equip its graduates with "four characteristics of an adequate education for living in the unknown world of the future."

"First, we must educate for independence of thought and action. . . .

"As a second characteristic of education, it must provide opportunities for a clearer understanding of the purposes and goals of American life. . . .

"A third characteristic is what I call a capacity for tension. . . . Some very good people break, and they break because they are brittle. We have to learn to roll with the punches and snap back. . . .

"Fourth and last: An adequate education for living in the unknown world of the future must include a recognition and acceptance of those great and lasting values which have come down to us from our civilization's rich past. . . .

"We stand together today—business, industry and education. If there is to be wisdom to guide our country's future, it will come as the fruit of our joint efforts to grow men of big minds, aware of our rich heritage, and capable of dealing with our complex tomorrows."

Accounting

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management.

"In the beginning," Mr. Howe stated, "Job Management is a matter of education. There are, however, two prerequisites to its successful operation. These must always be remembered.

"The first is that Work Simplification must have the full appreciation and enthusiastic support of top management.

"The second is that everyone in the organization must understand that no improvement introduced or perfected through Job Management will cause any employee to lose his or her job. People will be promoted and transferred, but never demoted or fired by reason of an improvement brought about in this way. Under any other policy, Job Management will not have the cooperation of all the people who are necessary to achieve its full objective."

Mr. Howe described specific tech-

niques for developing Work Simplification methods, based on process flow chart analysis, and gave examples of successful company applications.

In conclusion, Mr. Howe stated that, though Work Simplification offers no panacea, it is a valuable aid to management, and indeed a way of business life. In view of the problems ahead in the rapidly changing business world, managers must either get some kind of Work Simplification method, or be left behind.

H. L. Walworth, in "Automatic Meter Reading," gave a generally negative report on the results of an extensive committee study of completely automatic systems, and a positive report on semi-automatic equipment.

Principal obstacle to installation of completely automated meter reading systems is high initial cost of equipment, which in most cases appears to rule out any immediate application of even those methods which have been tested and

found workable.

Among these methods, Mr. Walworth described systems utilizing phone company lines to transmit meter information, mobile units with radio links to the meters, and mobile units reading meters by means of plug-in connections.

Much more promising economically, Mr. Walworth reported, are some semi-automatic meter reading systems.

One such system utilizes a special camera handled by meter-visiting personnel to record meter-reading data on film.

Another method for recording meter readings on film for electronic processing is a remote read-out system by which the data is transmitted from the customer's premises to an outside meter.

Especially promising is United Gas Corporation's recently-developed Meter-corder, a battery-operated, manually controlled device which records meter data on tape, which can be fed directly into an IBM machine for processing.

Medaris

(Continued from page 19)

route, and also busily engaged in an intimate relationship with the American gas industry, by the way. The streets of Springfield were lighted with gas, and I was low bidder for the job of lighting and turning out the lamps in my neighborhood.

Now the technological growth that has so influenced our time is apparent to all of you. We are surrounded by its evidence in the automobile, the airplane, radio, television, missiles, atomic energy and so forth. These are the nut-and-bolt manifestations of our technology. These are the pieces of technology in tangible, usable form and are therefore things whose purpose—and profit—can be comprehended by even the layman.

Research, however, is quite another matter. Research, in the truest meaning of the word, is pure science—not technology. My definition of research begins with the observation, investigation and cataloguing of phenomena. My definition of research does not extend the word into the area of development. To be more specific, I, along with many other people, prefer to divide research into two categories: the first, basic research; the second, applied research.

Since basic research is not oriented to immediate application or to the development of specific new products, too many people automatically equate basic research with bankruptcy. Then, trapped by the faulty logic that led them to that premise, they conclude that the responsibility for financing basic research should lie primarily, if not totally, with government. I am leery of that conclusion, both on the basis of my own political philosophy and on the basis of my personal involvement with government-financed research projects. I happen to believe, without equivocation, that maxim which states that the purpose of government is to do for us what we cannot do for ourselves.

Certainly, there will always be a great deal of government financing of basic research projects. To the extent that industry cannot afford to finance more basic research, then I endorse government financing, knowing as I do that basic research is absolutely essential to the technological health of the Free World and can ultimately

prove to be the key that controls our survival.

However, I do not believe that industry has extended all of the support to basic research of which it is capable, and I therefore conclude that we have not satisfactorily discharged our obligations to the common welfare.

In my opinion, industry can well afford to support basic research for at least the following reasons:

First, basic research is absolutely essential to technological growth, ergo, essential to industrial growth. It is our seed bed, and we can continue to take from it only as long as we nourish it.

Second, apart from the profits that eventually derive from basic research, industry should support that research, because it is in the national interest to do so.

If you accept this line of reasoning, then the question becomes: "How do we do it?"

Research by colleges

In my opinion, pure research should be institutionally administered and conducted—and by institutional, I mean colleges and universities. Institutionally conducted research tends to be more effective, because it is more objective. The university researcher is not a schizophrenic, torn between his intellectual loyalty to science and his obligations to "produce something we can sell." He is praised by his superiors for his objective pursuit of pure knowledge; indeed, he is even judged by the degree of objectivity he can bring to bear on his project.

Now, if you agree with my thesis—and I genuinely hope that you do—then I have at once done you a favor, and at the same time I have scored a point for one of my pet causes—that of education. You see, I happen to believe that when industry sponsors basic research at the university, there is a double-barreled benefit realized. Industry profits because the university environment encourages a cross-fertilization of original ideas, assuming, of course, that we are talking about a university with top-notch academic and research talent. And, if you agree with my thesis that you should sponsor institutional research, you have thereby provided that university with the wherewithal to acquire top-notch talent.

It occurs to me that some of you are

already thinking there must be some narrowing of the field in which an industry should be expected to sponsor research. I quite agree, at least to one limitation. In my opinion, industry's support of basic research should be limited to those areas of the physical sciences from which its future technology will spring.

Before you define those areas, however, you must decide what kind of business you expect to be in tomorrow—and I don't mean Wednesday of this week, I mean Walt Disney's kind of Tomorrow that is spelled with a capital T. Do you expect to be in the business of supplying natural gas? Then you'd be wise to spend a few dollars trying to obtain some advanced information on where your competition will come from in the future. Incidentally, you can buy that kind of information with research money.

I do not know of a single product or service that does not face technological obsolescence in the future. Not one. Rather than consider this fact a threat, I prefer to consider it a personal challenge, and it is my hope that you share my conviction.

In summary, I believe that your industry, no less than any other, must understand and commit into its philosophy, the following simple ideas:

First, that technological growth is the cornerstone of our defense, our economy, and therefore our freedom.

Second, that because American industry benefits from technological growth—both directly in the form of profit, and indirectly in the form of the preservation of free enterprise—industry, therefore, has an obligation to foster technological growth.

Third, that technology is derived from research, and without research there can be no technological growth.

Fourth, that basic research can best be accomplished by institutions of higher learning, supported by industry to the maximum possible extent and supported by government in whatever measure is required beyond that.

In short, with research, today's impossibilities become tomorrow's possibilities, and without research there is no change, no growth, no progress. You have a choice, and I am confident that the heritage, intelligence and vision of this organization will continue to permit no other choice but that of growth.

Gas school teaches by showing



George E. Marble, Education subcommittee chairman, greets speakers Robert A. D'Amour and Lowell F. Crouse



One of six Industrial Gas School student groups on a visit to an equipment manufacturer's plant

A record registration marked the 8th Biennial Industrial Gas School at the new Marriott Motor Hotel located on Philadelphia's Schuylkill Expressway during the week of September 18-22, 1961. The nearly 200 students came from twenty-nine states, including Alaska, the District of Columbia, and twenty-five were registered from Canada.

There was a radical departure from the traditional gas school in that much less time was devoted to classroom lectures. However, lectures on the first day served as a briefing for the following days.

The classroom session on Monday opened with a lecture on "Natural Gas Engines for Air Conditioning up to 1,000 tons," by Robert A. D'Amour, Waukesha Motor Company, Waukesha, Wisconsin. This talk covered the various types of gas engines and how they can be used with various compressor systems.

Then followed an outstanding presentation by Lowell F. Crouse, vice president, Maxon Premix Burner Company,

Muncie, Ind., on "Direct Fired Heating of Process Make-up Air." Mr. Crouse outlined the importance of make-up air in plants that do considerable exhausting because of processing operations that require venting, and how this make-up air can be heated by gas and controlled as demand varies.

The entire afternoon was devoted to a lecture by John Sellors, Jr., Pyronics, Inc., Cleveland, Ohio, on "Combustion Fundamentals." This was in effect a concentrated course in combustion engineering and application providing useful, practical combustion information that is not available in text books. Each step in his presentation included a live demonstration on a particular burner to cover the points under discussion.

For the plant visitation part of the school course, the students were divided into six groups, and each group maintained its individual identity for the next three days. On Tuesday, Wednesday and Thursday, one group was taken to each of the five cooperating manufacturer's plants and one group to a classroom lecture. By rotating the groups,

each had the opportunity of visiting each plant and attending one classroom session. Plants visited were:

American Gas Furnace Co., Elizabeth, N. J.

The Hauck Manufacturing Co., Brooklyn, N. Y.

Minneapolis-Honeywell Regulator Co., Philadelphia, Pa.

Orr & Sembauer, Inc., Reading, Pa.

Selas Corporation of America, Dresher, Pa.

At each plant, where the groups spent half a day, an expert in the particular field of activity of that plant described the equipment and its application.

Classroom sessions each morning and afternoon included lectures on two important gas applications.

One lecture was presented by the C. M. Kemp Manufacturing Co., Glen Burnie, Maryland, the time being divided between E. J. Funk, vice president, and Gladstone Keir, manager, gas operations. The lecture consisted of description and discussion of atmosphere

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Textile men talk turbines, infra-red



Dr. Robert C. Edwards, president, Clemson College, left, greets John G. Hopping, chairman of A. G. A. Textile Processing Committee

Nearly one hundred representatives from textile plants, together with industrial gas equipment manufacturers and members of the Southeastern Gas Association, attended the 5th Annual Textile Processing Symposium at Clemson College, Clemson, South Carolina, on September 14 and 15, 1961.

Giving consideration to travel time from textile plants in the immediate area, the meeting opened with a formal luncheon on Thursday. Official greetings were given by Dr. Robert C. Edwards, president of Clemson College, who gave a thumbnail sketch of the college and its activities.

Since he has been president of Clemson, Dr. Edwards stated he has come to believe that institutions of higher learning should really battle for the minds of youth. It has been his experience, he said, that most of these schools have done an excellent job in professional education, but a very mediocre job in human engineering. Dr. Edwards is out to correct that situation for his more than four thousand students. His ultimate goal, beyond professional teaching, is to instill in the minds of youth, basic Americanism along with academic proficiency.

Opening the session was John R. Harkenrider, AiResearch Manufacturing Company, Phoenix, Arizona, who spoke on "Natural Gas Turbines as a Prime Mover for Electrical Generation, Heating and Cooling, and Water Pumping."

Mr. Harkenrider described the development of different types of gas turbines and their successful use today by modern commercial aircraft to provide electrical, pneumatic and hydraulic power on the ground and in flight.

A number of suggestions was made for the use of gas turbines in manufacturing plants where expansion programs offered the opportunity for such a power plant. Mr. Harkenrider did not propose that existing prime movers be replaced immediately, but that there was a field where additional power might be required. One suggestion for textile mill application was electric power generation for peak-load periods and to minimize demand charges.

Following this presentation, a question and answer period evidenced keen interest in this type of prime mover as an auxiliary power source.

The second paper of the afternoon was presented by Don E. Newman, Bryant Manufacturing Company, Division of Carrier Corporation, Indianapolis. He spoke on "Drying Performance with Proper Relationship of Heat, Air Quality and Air Movement," starting with the premise that "almost all textile manufacturing operations require a drying stage somewhere in the production line . . . and it is of utmost necessity that methods of improving drying performance to allow increased production rates at lower costs be developed."

Mr. Newman went on to say that one

method of improving drying in existing equipment is to improve materially the quality of air being used for the drying operation. To do this is a matter of dehumidifying all air entering the dryer, both make-up air and recirculated air, to keep the vapor pressure differential at an optimum point and uniform throughout the cycle. He also went on to describe a drying system using infrared as the direct heat source in addition to dehumidified air circulation.

Closing the session, a panel discussion on "Gas-fired Infrared Heating—Characteristics, Generation and Application" aroused much discussion, not only with the assembled delegates but among the panelists themselves.

Those on the panel were:

John Williams, Sandoz, Inc., Charlotte, N. C.

C. Wayne Jarvis, Rock Hill Printing & Finishing, Rock Hill, N. C.

N. R. Vieira, E. I. DuPont de Nemours & Co., Charlotte, N. C.

Edwin S. Mack, Asheville, N. C.

Charles E. Zeigler, moderator, executive vice president, Public Service Company of North Carolina, Inc., Gastonia, N. C.

To open the discussion, provocative questions on drying operations at various processing stages were placed before the panel. An infrared burner was demonstrated, and it was the collective opinion that the use of infrared was

advantageous as an auxiliary to raise the differential of vapor pressure, but only under precise control. It also was agreed that the best method of pre-drying is by infrared.

Considerable discussion took place as to the best method to minimize dye migration during drying. While there was a wide divergence of opinion, it was generally agreed that each particular fabric, and even different colors, requires its own temperature and rate of drying to hold migration to a minimum.

The Friday morning session had three speakers, with Dr. T. D. Efland, head, textile research department, Clemson College, first on the program. He spoke on "Research at the College and Industry Level."

Dr. Efland stated emphatically that, by far, not enough research is being done on textiles in general. He also stated that every branch of the textile industry should become aroused and pursue research diligently. It is not enough that machinery and process operations be improved; research is needed to find the answers to many problems confronting the industry.

Dr. Efland added that the textile industry for the most part is reluctant to pioneer new developments. It is obvious, he went on, that there must be a reduction in manufacturing costs, and one way would be to develop continuous processes that have succeeded in other

industries.

He concluded his talk with the admonition that textile research should be done on processing as a whole throughout the industry rather than on individual segments.

Edwin S. Mack, a manufacturer's agent, Asheville, North Carolina, spoke on "Temperature Measurement and Control," during which he outlined the economic desirability of proper temperature measurement throughout the entire textile field of dryers, ovens, liquids and curing operations.

Closing the symposium, Bill Weber of Viking Superior Corp., Brooklyn, New York, spoke on "Hot Water at Point of Use." He described products of his company including immersion coils and storageless water heaters utilizing an indirect method of water heating acknowledged to be vastly superior to the direct method.

The water heaters have the ability to handle high instantaneous demands, have long life, and have low operating and maintenance costs. As Mr. Weber explained, the textile mill needs a water heater that can accommodate varying loads as demanded by any particular processing operation.

After the session, a tour of Clemson College was conducted through the School of Textiles, the pilot spinning plant and the Agricultural Marketing Service.

Thermoelectricity in control



Norge has introduced the first refrigerator with a thermoelectric control. The device shuts off gas flow immediately if the flame is extinguished

Industrial gas school

(Continued from page 36)

generators and protective atmospheres.

The other lecture was given by Herman Gehrich, Gehrich & Gehrich, Woodside, Long Island, N. Y. Mr. Gehrich went into great detail on gas-fired ovens and the multitude of applications in the low-temperature field of under 1,200° F.

On the last day, the school session was devoted to a round-table discussion of "Creative Selling Techniques and Salesmanship," conducted by Hugh Robertson of Porter Henry & Co., Inc., New York, N. Y.

The students were divided into twelve teams, each at its own table. During the discussion periods, various tables were called upon individually to state their opinion on the subject at hand or give constructive criticism as the case might be. On tape recordings, several actual gas sales presentations were played to the school. Then the various teams were asked what errors were made in the sales presentation, what was right or what was wrong, or how would they have gone about selling that particular item or service.

This procedure brought forth a host of ideas, and the students received a wide variety of sales suggestions.

Copies of the 1961 Industrial Gas School lectures are available from the American Gas Association, Order Department at \$5.00 each.

'Unisphere,' near gas building, will symbolize fair



A giant stainless steel globe will be the symbol of the 1964-65 World's Fair. Known as "Unisphere," it will represent the earth, with the continents in raised outline and with surrounding satellites. The structure will be in the center of the grounds, not far from the Gas Exhibit building



Operating Section officers: (From left) H. L. Fruechtenicht, outgoing chairman; E. F. Trunk, incoming chairman; J. T. Innis, 1960 chairman; J. Davis, Jr., 2nd vice chairman; and A. B. Lauderbaugh, 1st vice chairman

Contractors dig, strike gas—in utility mains



Speakers included N. B. LauBach (front right); and panel members F. B. Fry (left); F. J. Pfluke; R. C. Holcombe; and F. H. Bunnell

Automation is justified if a 1 per cent improvement in operating efficiency results from the installation and use of automated systems, N. B. LauBach, vice president of Colorado Interstate Gas Company, told members of the Operating Section during the A. G. A. Convention in Dallas.

The chairman of A. G. A.'s new Automation Committee observed that automation is a philosophy rather than hardware, adding that its goals are not the development or application of automatic equipment but more dependable operation and improved service.

Mr. LauBach called upon all departments of gas pipeline and distribution companies to avail themselves of automation's potentials, recommending that each department be carefully studied to determine whether its operations are compatible with total automation.

In suggesting that companies study their own automation needs and relay them to manufacturers of automatic equipment, the Colorado Interstate executive warned against burdening suppliers with superfluous or useless information.

F. H. Bunnell, manager of gas distribution for Consumers Power Co., moderated the first panel discussion on reduction of damage to underground utility structures ever presented by the Section.

Participants included Frederick J. Pfluke, assistant vice president, Rochester Gas and Electric Corp.; Richmond C. Holcombe, manager of the Philadelphia Gas Works' distribution department; and Frank B. Fry, superintendent of the gas street department, Public Service Co. of Colorado.

Terming the excavating and pipeline contractor "a valuable and often necessary adjunct to the construction phase of our business," Mr. Bunnell declared that the contractor "most certainly understands our substructure problems and often participates in the development of tools and techniques for doing better work."

He noted, however, that these contractors also may be employed by other utilities for underground work which intersects or parallels gas facilities. "In each instance," he said, "the contractor is under economic pressure to obtain maximum production. Because of this drive to get results, his workmen and supervisors are susceptible to lapses of attention to detail.

"When this happens, the exercise of that high degree of care required when in close proximity to gas facilities is momentarily missing. The resulting mishaps can be serious and costly to the public, the utility and the contractor."

Mr. Pfluke reported that the problem of contractor damage has been plaguing the Rochester company to an increasing degree each year for the past 10 years, adding that the contractors involved are those employed by the city and nearby towns in sewer, water and highway construction work.

Citing careless and uncooperative operators as the chief offenders, he said RG&E in 1953 was partly instrumental in securing the passage of a state law requiring that a gas utility be advised at least 72 hours in advance of any construction or blasting operations near distribution facilities. The law also requires that reasonable care be exercised to avoid damage to subsurface structures and makes violation a misdemeanor.

"The fact that a few contractors are responsible for most of the damage indicated that, in addition to continuing our efforts to impress upon all contractors the importance of care in their excavation operations, we should bring pressure to bear upon these contractors with the poor records," he said.

Contractors forewarned

Under RG&E's contractor relations program, the company works closely with city officials and inspectors, county officials, municipal public works authorities and their contractors, insurance carriers, and contractor supervisors and operators. In addition, an expanding company inspection team locates and marks underground facilities for contractors, and company inspectors conduct immediate procedural investigations into any incidents involving damage.

Mr. Holcombe told Section members that a company can reduce damage to its facilities if it is forewarned and informed concerning imminent construction work or danger near its subsurface structures.

"Armed with this knowledge," he said, "we must then anticipate the possible dangers and take necessary action, including communications with the agency which is doing the work."

"But the subject, in its full sense, is not as simple as setting up routine standards and procedures. It requires organized and continual unrelenting and

unrelaxed attention. It requires a proprietary interest by a specially delegated, responsible supervisor in what is going on throughout the area supplied by the gas company facilities."

Mr. Holcombe said PGW maintains daily contact with city and state administrative forces through a high-level company employee. "This daily personal liaison," he said, "keeps us fully informed on work through all phases of construction planning up to the notice to the contractor to proceed."

"In all jobs concerning paving and repaving," he continued, "the start of contract construction is prohibited until formally released and certified by each utility that its work is completed. Then a formal notice to proceed is issued."

"From this point on, we keep in contact with the contractor. It is worth noting that, over the years, the regular contractors have become well aware of our interest and are most cooperative in keeping us informed of their plans. This good relationship is not hard to sell to new contractors who occasionally appear on the scene."

One of the most important understandings between PGW and constructors of other underground structures is that all other utilities' facilities, including sewers and water lines, must be completed before gas construction begins.

"This not only reduces our exposure to damage by others," said Mr. Holcombe, "but it assures installation of our mains and services from the other utility services."

Programs for getting the story across to contractor engineers, supervisors and employees were discussed by Mr. Fry, who showed Section members various "Before You Dig" reminders prepared for workers whose everyday jobs place them in direct physical contact with underground gas facilities.

He said, "We are attempting through correspondence, literature, personal meetings and gadgets, to change people's habits by asking them to call us before they dig, so we can help them. This is new. It's a radical change from their old habit of digging any old time, anywhere, without notifying anybody or bothering to determine what buried structures might be in their path."

The Public Service official also cautioned his audience against limiting its concern only to damage involving gas structures. He observed that a closely related subject involves damage to such

other facilities as fire alarm and traffic control cables, water lines, sewers, and power and telephone cables.

"These," he said, "are structures we damage every day. This is costly, not only from the standpoint of actual damage, but in lost production due to delay in our own construction program and in damaged public relations."

"One may say that this is not part of the problem, but it is, very much a part of it, for they go hand in hand."

"The contractor working for us today may be doing work for someone else tomorrow," Mr. Fry continued. "If he is permitted to operate and perform his work under our supervision in such a way as to indicate a disregard on our part for the protection and safety of others' facilities, how, then, can we expect him to safeguard and protect the gas facilities when working for some other organization?"

"In short," he said, "we must educate those in charge of, and operating, equipment to the end that it is important to protect all subsurface facilities from damage at all times, regardless of what they carry or to whom they belong. This applies to the personnel in our own organizations, as well as those of the contractor."

In the business portion of the meeting, members named three new officers to head the Operating Section for the 1962 Association year.

Edwin F. Trunk, chief engineer, Laclede Gas Co., was elected chairman, with A. B. Lauderbaugh, assistant vice president, The Manufacturers Light & Heat Co., as first vice chairman. The new second vice chairman is Jay Davis, Jr., vice president, Southern Counties Gas Co. of California.

Six Operating Section Awards of Merit also were presented during the meeting by L. T. Potter, A. G. A. president.

Recipients included Willard E. Lebo, production staff engineer, Public Service Electric and Gas Co.; Frank P. Mueller, assistant director of safety, The Peoples Gas Light and Coke Co.; J. Louis Oberseider, gas supply engineer, Pacific Lighting Gas Supply Co.; Charles D. Taft, general superintendent, The Gas Service Co.; and Raymond W. Todd, vice president and executive engineer, Pacific Lighting Gas Supply Co.

An Award of Merit also was presented posthumously to Robert W. Alexander, The Cincinnati Gas & Electric Co.

Murray

(Continued from page 24)

for an additional year.

Your speaker was wholeheartedly in accord with the stated objectives of the committee but did not believe that the recommended legislation represented a practical approach to the problem, nor that it was wise to attempt a partial legislative remedy before coming to grips with producer regulation, which was acknowledged by the entire committee to be the heart of the problem.

This view, however, did not prevail and the committee's proposed legislation was introduced by Senator Magnuson as Senate Bill 666. In order that you may be aware of the considerable support for this bill, some extracts from the testimony before the Senate Committee hearing will be presented.

Peter Mitchell, president of NARUC, read a statement from Governor Brown of California endorsing the bill, testified that his association supported it, and in regard to the so-called "anti-pancaking" provision testified that "Section 3 is especially meritorious and would effect long overdue reforms."

Judge Everett McKeage, president of the California Public Utility Commission and principal draftsman for the committee report containing the recommended bill, testified at length justifying each section and concluded his testimony as follows:

"Sad and costly experience has taught us that here . . . is a problem which is not only ripe, but rotting, for solution. In fact, the solution is unardonably long overdue. I urge you to write this bill into law and thus throw a wall of protection around the gas consumers of this country and thereby restore the Federal Natural Gas Act to its original purpose, that is, 'to protect the consumer interests against exploitation at the hands of private natural gas companies.'"

The San Francisco *Examiner* carried an editorial which was reproduced and mailed to members of Congress and to all utility commissioners. The editorial is quoted in part as follows:

"The two-day hearing . . . on S. 666 . . . relates in an important way to the pockets of California natural gas consumers.

"Present law permits a gas supplier to put a rate increase into effect without waiting for approval of the Federal Power Commission. . . .

"This has happened repeatedly in California. . . .

" . . . To date they have cost California gas

consumers an unapproved \$250 million. And nothing in the law could prevent further rate increases every five months through the indefinite future. . . .

"Why the amendment permits even the first request to have automatic effect without a finding of necessity is a mystery. But at any rate, . . . this amendment . . . offers partial remedy of the fantastic unreality existing under present law."

Several other members of NARUC, including Commissioner David Brackman who will succeed Mitchell as president, all testified in support of S. 666. Additionally, the Honorable Leo Larkin appeared as the official representative of the National Institute of Municipal Law Officers, which is an organization composed of more than 1200 municipalities in all 50 states. Mr. Larkin testified in support of S. 666 as follows:

"The adoption into the law of . . . S. 666 is in the public interest and has the support of NIMLO. The bill will protect consumers of natural gas and restore to the Natural Gas Act its original intent, i.e., to protect consumer interests against exploitation by private natural gas companies."

He called attention to the fact that some of the natural gas cases before the Federal Power Commission are more than eight years old, that over \$600 million per year in increased rates is being paid to interstate pipeline companies, that such increased rates are subject to refund orders and that the uncertainty as to the cost of gas purchased by local natural gas distribution companies unnecessarily burdens the municipal law officers with the task of estimating refunds. Therefore, his association had passed a resolution requesting the Federal Power Commission to expedite the disposition of its natural gas rate cases, and he expressed the belief that S. 666 would accomplish this objective.

But, in spite of the weight and prestige of these associations which proposed or endorsed S. 666, it soon became apparent that, although the natural gas industry in the main concurred with the stated objectives of S. 666, there was strong disagreement that the bill as written would accomplish these objectives. For example, W. M. Elmer testified as spokesman for the Independent Natural Gas Association of America as follows:

"This industry is greatly alarmed over the possibility of Sections 3 and 4 being enacted into law. These sections represent the most serious threat to the natural gas industry of any legislative proposal in a period of some fifteen years. The conse-

quences of such legislation, if enacted, could be very disastrous to the industry and to the public it serves."

Clayton Orn, speaking in behalf of the American Petroleum Institute, the Western Oil and Gas Association, and the Mid-Continent Oil & Gas Association, testified that:

"I respectfully submit that the proposed legislation would increase rather than decrease the already impossible burdens of the Federal Power Commission; it would increase rather than decrease the amount of litigation to which the Federal Power Commission always is a party; it would reduce the supply of natural gas to the consumers—to their great detriment; and it would constitute a grave injustice to the producers of natural gas and might well be held unconstitutional as confiscatory, or as a denial of due processes."

Mr. Ed Parkes, representing the American Gas Association, concurred with the objectives of NARUC and told of the work of the "Special Committee of Executives on Regulatory Affairs" of which he served as chairman. He stated:

"To the American Gas Association it seems that a comprehensive approach must be taken in order to remove the concern over regulatory delay—a concern we share with regulators, the informed public, and members of this committee. Delay is caused by a number of factors. To cure delay we must attack each of the factors contributing to it. The whole approach of our committee has been consistently directed to identifying causes and to recommending action to remove these causes. It appears that Senate Bill 666 is directed more to the results of delay than to the causes. It deals not with delays or expedition of rate cases, but solely with the matter of limiting rates and rate increases. It was apparently drafted on the theory that by inhibiting rate increases the delays in handling such proceedings will be eliminated. That approach fails to attack the roots of the problem."

Judge Dean Landis stated:

"Problems that arise out of federal regulation of the natural gas industry . . . are more serious presently in this area . . . than in any other. Failure to solve them has not only aroused indignation among the large consuming population in the North, but because of heavy contingent liabilities threatens further expansion of production and transmission facilities and may well have a deterrent effect upon the incentives necessary to explore and develop further reserves of natural gas. It is important for everyone that regulation be effected because nothing is worse than the stalemates that result from tardy and ineffective regulation."

A Washington news reporter, Clyde

La Motte, writing in the *Oil and Gas Journal*, discussed the hearings on S. 666 as follows:

"There is at least one major point of agreement between state utility commissioners and independent producers: The present system of natural-gas regulation is pretty hopeless. . . .

"The difference in views of these state commissioners and most segments of the industry lies in what should be done to correct this absurd situation. . . .

"Congress is a long way from deciding what it should do about the gas regulatory mess. . . . Thus, . . . little or nothing will be done by Congress this year, and the problem will be allowed to fester for another year."

While these conflicting views on the benefits of S. 666 were being expressed, Congressman Harris on June 8 introduced H. R. 7575, which was designed to amend the Natural Gas Act particularly for the purpose of clarifying the method of producer regulation. There is much to be said in support of 7575, and a great deal of work went into its preparation. But it contains an "anti-pancaking" provision (Section 103c) which is generally unacceptable to the natural gas industry. A similar provision in S. 666 was the basis of much of the opposition previously quoted. Additionally it appears that the NARUC committee believes H. R. 7575 contains ambiguities and possible contradictions, and the committee is concerned about unintended but possible encroachment upon state authority. It is the view of some members of this NARUC committee, in which your speaker strongly concurs, that the only hope for wise legislation lies in concerted action by all segments of industry and public bodies representing consumers. This thesis is seemingly generally accepted by industry and by Congress. Thus, neither S. 666 nor H. R. 7575 in its present form meet these requirements and, therefore, cannot be expected to pass.

While these efforts at remedial legislation were being made during the last session of Congress, the Federal Power Commission was attempting on its own initiative and without assisting legislation to clear up the regulatory chaos. In its famous statement of policy issued at the time of its decision in the Phillips case, it announced that it was abandoning attempts at utility-type cost of service regulation which had proven impractical and was turning instead to area pricing. Chairman Kuykendall re-

ferred to it as "the last best hope," and industry generally seemed to be encouraged by the new approach. But at the Permian Basin and other hearings on area pricing, confusion soon developed as to what standards should be used, and to many observers it appeared that the Federal Power Commission was turning back to cost of service. At this stage, the membership of the Federal Power Commission was largely changed and Swidler replaced Kuykendall as chairman. In the September issue of *Gas* magazine, an article by the Washington Bureau states:

"Tougher and tighter utility type control of the natural gas industry from wellhead to burner tip is being charted by new FPC Chairman Joseph Swidler. There will be no approval . . . of any natural gas bill that would substitute commodity pricing for present utility pricing. His demand for 'industrial statesmanship' from gas companies, clearly implying that they end the fight for business freedom and gracefully accept complete government control, struck these men dumb."

With representatives of the regulatory bodies and the consumers advocating S. 666, which industry representatives said would not only be ruinous to the industry, but do irreparable damage to the consumer, and with the allegedly industry-sponsored H. R. 7575 neither acceptable to industry because of 103(c) nor acceptable to NARUC, and with the FPC having turned to area pricing as its "last best hope" and then apparently abandoning it without ever giving it a real trial, I attempted two weeks ago to draft this speech in a spirit of complete discouragement. I could find no realistic basis for hope, but kept saying to myself, "There's gotta be hope." Consequently I grasped at the recent encouraging signs described in my opening remarks.

With this thought we will turn briefly to a much larger problem. Realism compels us to recognize the peril in which civilization finds itself today. Nuclear warfare can largely destroy civilization. Even a continuation of uncontrolled nuclear testing may increase radioactivity to the point of imperiling future generations. But most of us say to ourselves, "There's gotta be hope," and we seem to believe that the very awesome implications of nuclear war or nuclear testing may produce international control and disarmament before it is too late.

But we who live in the free world do not always seem to recognize that,

even if through mutual fear we reach a stalemate and avoid extermination of society through space-age nuclear warfare, we face equally certain peril, although it may come about in a slower and less cataclysmic fashion. We may be rightfully proud of the power and growth of the democracies of the world and the fact that their peoples enjoy the highest standard of living in the history of civilization. But the comfort we take in this fact is short-lived when we realize that, on an average, 100 million people turn to communism each year. All we need to do is maintain the status quo and enjoy our good life for a few more years, and we have hopelessly lost the battle with communism.

The reason for this fact is that four-fifths of the world's people are hungry, diseased, oppressed and think that their only hope is in the false promises of communism. It has long been recognized that there can be no co-existence of a world part free and part slave. But unrealistic idealism sometimes blinds us to the fact that by themselves no Magna Carta, no Constitution, no Bill of Rights, no Atlantic Charter, no United Nations document can produce freedom. Political freedom is meaningless without freedom from want.

More energy needed

And, as dreadful as is the plight of the hungry, diseased, underprivileged peoples of the world today, the population explosion threatens to rapidly worsen the situation. But the world's leading demographers, ecologists and scientists offer some basis for hope if there can be a leveling off of population trends and a prodigious increase in the use of mechanical energy throughout the world. Machines and mechanical energy have liberated more slaves than all of the revolutions of history. Ultimately, the salvation of mankind lies in harnessing, for peaceful purposes, the awesome nuclear power which threatens today to destroy him. But our scientists of greatest vision, the experts in nuclear, solar and other exotic sources of energy for the future, all agree that, for the remainder of this century, petroleum will constitute the dominant source of energy for the entire world.

"There's gotta be hope" for civilization, and to a large extent this hope, for the remainder of the twentieth century, rests upon energy derived from oil and gas. This places a heavy and

sobering responsibility upon the petroleum industry and upon those state and federal legislative and regulatory bodies which will determine the ability of our domestic industry to adequately serve this nation and offer leadership to the world.

Consumption of natural gas in this nation has increased during the postwar period even more rapidly than the consumption of oil. At present we are finding new supplies of gas each year about equal to our production. At first this might appear adequate, but it offers no hope of supplying the greatly increased demand forecast for the future. In the postwar period, gas consumption has increased 8.6 per cent annually. It is forecast that this increase will continue at a rate slightly less than 5 per cent annually until 1970.

But according to testimony before the Senate Committee on Commerce, new supplies must be added at a rate of one and one-half times the net production if we are to have enough gas during the next 20 years to provide for a growth of only 2.6 per cent annually. Without intending to be an alarmist or suggesting that we are running out of gas, realism forces us to recognize that we must have greater, rather than less, incentive in the future for exploration and development of new reserves if the forecast demand is to be met.

Many believe that, when the consuming public finds itself with inadequate supplies occasioned by unrealistic regulation, there will be a demand that such regulation be abandoned. But, unfortunately, experience in other nations indicates that the public rarely has the ability to reason the cause of its predicament, and, when supplies become inadequate, they demand more regulation instead of less, until eventually the regulated industry has passed the point of no return and is headed precipitously towards nationalization. Nowhere in the world has a nationalized petroleum industry ever been able to either develop adequate reserves or even efficiently produce and distribute the reserves which were developed by private enterprise prior to nationalization.

So my concluding plea is "There's gotta be hope" for the gas industry. In spite of the disappointments and frustrations of unrealistic legislation and regulation, the gas industry must somehow survive and offer even better service to a greater number in the future. You will have to exercise maximum ingenuity and efficiency and minimize rate increases necessitated by rising costs. Through research and salesmanship you will need to develop year-round domestic consumer demand so as to obtain the economy of high-load factor without so-called "dumping" of gas.

End use control by regulatory bodies should always be opposed as an unrealistic approach and completely contrary to our competitive free enterprise system. But, to the extent that it is possible to do so, the conditions which have produced the demand for end use control should be avoided in the future.

Every possible effort should be made to acquaint the consuming public with the problems inherent in supplying them adequately. But these problems should not be exaggerated.

Be attentive to the complaints, the misunderstandings and the prejudices of the consumer. Stay in close contact with the various utility commissions and help them understand that, for the distribution of gas, the utility-type cost of service method of regulation is fair to industry and consumer, but when this same concept is applied to the producer, it places a premium on inefficiency and hard luck, and as the Federal Power Commission has learned from experience but as the utility commissioners have not yet had opportunity to know, this unrealistic form of regulation results in great ultimate detriment to the consumer.

Maybe you can help make it possible for a future speaker on the subject, "Realism and Regulation," to avoid frustration and have actual accomplishments to discuss.

Convention

(Continued from page 6)

Khrushchev is a victim of forces beyond his control. Though war would surely be a disaster for the Russian nation, Khrushchev himself might be driven to it as the only alternative to certain death before a Russian firing squad. In that case, Dr. Nyaradi said, we might expect Khrushchev to take his chances with nuclear war.

This country's best defense, said Dr. Nyaradi, is to keep itself strong militarily and economically. The latter is best accomplished, he said, by fighting the infiltration of Socialist ideas into this country, resisting the trend to government ownership, and by active business support in selling the American system to our own people.

Upon concluding, Dr. Nyaradi received a standing ovation from the assembled delegates.

At the Wednesday General Session, opening speaker was Erik Jonsson, chairman of the board, Texas Instruments, Inc., whose subject was "Greater Goals for Management."

Mr. Jonsson gave four secrets of a successful company: modern plant and tools, employee and management incentives, striving for earnings to match the most successful companies, and difficult but achievable goals.

Mr. Jonsson saw better management as a necessity for survival, and as the answer to competition from low-paid labor.

As one important tool of management, computers will play an increasing role in everything from "management games," by which executives will be trained, to long-range economic forecasting.

Development of better managers must come through education, Mr. Jonsson said—not traditional education, but training which will be flexible and adaptable, and which will stress intelligence, the ability to think, mental and physical fitness, and creativity.

Substituting for Robert E. Kintner, president, National Broadcasting Company, who was unable to be present, Don Durgin, NBC, gave a preview of the current season's gas industry sponsored television show, "Theatre 62."

Slides were shown of scenes from rehearsals, and the delegates viewed for the first time the new filmed gas commercials starring Jinx Falkenburg. That same evening, these commercials went on the air nationally with the televising of the opening play in the series, "The Spiral Staircase."

The concluding event of the Convention was "The Big Round-Up" luncheon for all delegates and ladies.

Chester S. Stackpole, managing director of A. G. A., presided over a morale-boosting finale in which slides portraying the history of the American gas industry were dramatized by interludes in which costumes of the periods illustrated were modeled, to enthusiastic applause, by wives of gas industry leaders present.

face up to the full obligations and difficulties of regulated public service, which include much more than simply brokering and transporting wholesale gas supplies.

The distributor was forced to confront the overwhelming prospect of seriously increased and increasing costs of gas, and, worse yet, he had no way of even guessing what the future held for him, in specific detail. He knew only that if the trend continued, he would be priced out of the market but would continue with an obligation to buy that which he could not sell.

There is little wonder that disillusionment set in—affecting each of the three segments of the industry. Then came the crowning discouragement when Federal regulation was placed in the position of being essentially unworkable. Here was an industry, of three segments, confronted in each of its segments with extremely disappointing developments, coming on the heels of what had been such pleasant actualities and prospects; while, to compound the difficulty, the industry was placed in the unyielding strait-jacket of an unworkable Federal regulatory pattern. No wonder there were recriminations—and there were; no wonder there were even desperate efforts to find a way out of the trap—and there were; no wonder there was a lack of industry consciousness and responsibility—and there was such a lack.

Here was an industry about to "come unbuckled"; about to fall apart; about to go to war with itself; about to become resolved into three armed camps, each mobilized and resolved to protect or enhance its position. Remember, there were ads in the newspapers, there were violent interventions in rate cases, there were expressed threats, and there was a general state of impatience on the part of each segment of our industry with each of the other two—extreme feelings—even enmities—were arising out of misunderstanding—if not misunderstanding—a lack of understanding.

But the measure of an industry is to be found in what it does in the face of severe difficulties. Here was an industry—the gas industry in three segments—confronted with severe difficulties, seemingly insurmountable difficulties; difficulties which caused great concern in relation to the well-being of one's own

individual company. It is a human and understandable reaction for a fellow confronted with such great difficulties to say, "To heck with the industry, I must look after my company." And so he must—but if he is wise he also will recognize that by and large he cannot finally escape, or avoid, or remain apart from, whatever happens to his industry.

So, selected individuals, representative variously of the three segments of the natural gas industry, came together to seek understanding; first, understanding, then later to seek whatever would properly flow out of the greater understanding achieved. It is fair to say that the representatives of each segment entertained the idea at first, at least in hope, that the work would lead to a nearly perfect solution to the problems existing from the particular standpoint of his own industry segment. Soon, however, it became clear that there was no perfect solution; the solution which was theoretically perfect for one segment was unacceptable to the other two. So, the solutions to be found to the problems necessarily would be through reconciliation or accommodation of divergent interests into a pattern that the great preponderance of industry and others could find acceptable.

Understanding brings results

I can report to you that there has come out of the work of the "Understanding Group" a large measure of statesmanlike understanding—which, of course, always requires fuller propagation and enlargement. Also, out of the work and thought of industry men, based upon this more nearly full understanding, have come accomplishments of a more finite nature which I necessarily mention in general but should not here attempt to describe in detail.

Here, then, in our Industry's Understanding Program, we find another prime product of "The Spirit of An Industry." In no case of industry activity has this "spirit" been displayed to the greater credit of our industry than in this Understanding Program.

As we look to the future in this connection and undertake to anticipate future events, we can be sure that we, as an industry, will be able to achieve acceptable solutions to our problems in relation to our producer segment only if a reasonable measure of the good spirit is caused to prevail. To illustrate, I refer to the Policy Declaration of the

Federal Power Commission Number 61-1, which apparently was issued to give a basis for instituting what is commonly called "Area Pricing" as a partial criteria for the regulation of field prices of gas. I would observe that the said Policy Declaration was, in general substance, a masterful effort to establish something workable in regulation of field prices for gas. Further, I would say that, in general, the approach suggested by the Commission is the only one yet suggested having any semblance of rationality, taking into account the state of the law as one may now understand it to exist.

I would express the judgment, furthermore, that when the law is changed, as it should be, there would still be need for the basic elements of the Commission's Policy Declaration in order to achieve practicable regulation.

Sniping hampers progress

It now appears certain that the implementation of the Policy Declaration has been hampered, because industry has sniped at the Declaration in detail to such an extent as to prejudice effectuation of the basic principles implicit in the Declaration. Such persistent attack upon the detail of the Declaration is not consistent with "The Spirit of An Industry" which has brought forth progress in relation to producer regulation. It is to be hoped, and I certainly expect, that industry, in due course, will have established such balance and will exercise statesmanship to the extent of foregoing attack upon detail, in order to sustain what ought to be acceptable principle. It is in such circumstances as these that we can discern the difference in results which accrue according to the attitudes which are brought to bear. If the objections in detail being offered by the industry to the establishment of the principle described as "area pricing" should have the result of making progress impossible, then industry might find itself in somewhat the same position as the man described by President Lincoln. This man had murdered his father and mother and upon being convicted, he had pleaded for clemency on the grounds that he was an orphan.

With this example, I conclude my references to specific industry activities which seem to me so well to reflect the subject I adopted for this talk. I have mentioned the A. G. A. Staff and Committee work in general. I have referred

to Research. I have commented on the GID Committee and the SCERA Committee and their programs. I have discussed the activities of our Industry Understanding Group. There would be others that I would name and commend specifically, if my main purpose were one of giving full credit to all. But my purpose, I remind you, is rather to define and emphasize that controlling ingredient, "The Spirit of An Industry." When that spirit is good, as I represent it is good in our American Gas Industry, activities proceed and results are achieved, which would not be possible if the people of our Industry were of a different and less favorable temper. We are moving—moving amazingly well—and I am convinced we shall continue to move well—so long as we have the will for it.

Now upon this background, I take the liberty of making a short statement in a broader vein; perhaps it will seem at first to be beyond the scope of this presentation.

I am thinking in terms of the welfare of our country, upon which the welfare of all of us depends. Our country will maintain or strengthen its position in this unsettled world only if the true sources of our substance and strength

are maintained. More and more we should be realizing that this husbanding of our strength, so necessary to our existence, is not achieved by mere wish—or by law—or by "trick or treat." I am quite convinced as I go along that it is not in the realm of government or politics or even education, primarily, where we find our strength. Rather, I urge the proposition that the business community bears a large share of the responsibility for maintaining our strength and substance.

It is sure, of course, that our business community shares this responsibility with other elements of our society. It is also sure that the business community must have the spirit and ability which underlie successful operations if it is to generate and maintain the strength so necessary to our survival. So, the business community, of which our industry is a part, bears a major responsibility. I have felt the urge often, as most of us have, to complain about government, for instance, and to charge to government the major responsibility for what happens to us. But the business community is a major force and it can be a larger, more constructive one, through performance, through the process of better achieving

its own immediate, particular purposes, and through successful operations.

This being so, it should be our fervent wish that the spirit we develop and maintain will be adequate in quality and amount to permit us to meet our obligations: our obligations to serve our individual interests, our obligations to serve our own company interests, our obligations to serve the proper joint interests of our industry and, through the successful discharge of the foregoing, to serve the interests of business as a whole and, hence, the interests of our country.

From this broader context, then, I come back to our gas industry. I say to you, that our industry is moving as it never has moved before, and we may be confident that it will do even better in the years to come. We can be so sure about the present and so confident about the future, because we have before us such overwhelming evidence that the spirit of our industry is at a high level of quality and intensity.

This is illustration and it is proof that what is most important of all is "The Spirit of An Industry." I would urge that we strengthen this spirit, that we cherish it and use it, because it offers the key to a glorious future.

Awards

(Continued from page 12)

President Potter noted that Mr. Cramer has been prominent in the Association's gas distribution activities for more than a decade.

Mr. Cramer has been vice chairman of the Distribution Subgroup for the revision of American Standard B31.8 on Gas Transmission and Distribution Piping Systems since it was organized in 1952, and he also headed the editorial group responsible for the material as presented in B31.8.

Since 1957, he has been chairman of the American Standards Association Subcommittee B31.2 pertaining to gas fuel lines and industrial installations and has directed a thorough revision of this standard.

Formerly chairman of the A. G. A. Corrosion Committee, he now is a member of the Advisory Committee on the Revision of the Gas Engineers' Handbook and member of ASA Sectional Committee Z83 on Industrial Gas

Equipment Installation and Utilization.

The Industrial-Commercial Achievement Award was presented to Edmund L. Spanagel, manager of the commercial and industrial sales department of Rochester Gas and Electric Corporation.

Sponsored each year by Moore Publishing Company, the award honors an individual who "has made an outstanding personal contribution to the gas industry which has enhanced the use of gas for industrial and/or commercial purposes." The award includes a certificate and a \$500 cash prize.

President Potter cited Mr. Spanagel for "his outstanding contribution to safety in the utilization of gas through his work on the A. G. A. Industrial Gas Practices Committee."

Mr. Spanagel served four years as chairman of the committee and has long been associated with A. G. A.'s Industrial and Commercial Section.

A. G. A.'s Order of Accounting Merit awards were presented to six gas industry executives.

Receiving the awards at the October

2, afternoon meeting of A. G. A.'s Accounting Section were: E. M. Alt, assistant treasurer, Northern Indiana Public Service Co.; Francis T. Hager, manager of the collection and meter reading division, Philadelphia Gas Works Division, The United Gas Improvement Co.; Malcolm S. Lonon, treasurer, Consolidated Natural Gas Co.; Harry F. Luther, assistant treasurer, North Shore Gas Co.; Charles D. Otcasek, supervisor, machine accounting development, The East Ohio Gas Co.; and Arthur Skelton, general superintendent, accounts division, The Peoples Gas Light and Coke Co.

The awards were conferred on members of the Accounting Section for outstanding service to the industry in accounting and related activities. Including today's presentations, only 68 such awards have been made since 1919.

Candidates are selected on the basis of active A. G. A. committee work, demonstrated leadership through service as an Accounting Section officer, and authorship of a major written work of

interest and benefit to utility accounting, published in a national magazine.

Operating Section Awards of Merit were awarded to six gas industry executives and operating engineers.

The awards, presented by President Potter, are made annually to individuals for "having faithfully and constructively served the American gas industry and made continuous and extensive contributions to further the interests and promote the welfare of the industry and of the public to which it is dedicated."

Receiving the 1961 awards were: Willard E. Lebo, production staff engineer, Public Service Electric and Gas Co.; Frank P. Mueller, assistant director of safety, The Peoples Gas Light & Coke Co.; J. Louis Oberseider, gas supply engineer, Pacific Lighting Gas Supply Co.; Charles D. Taft, general superintendent, The Gas Service Co., and Raymond W. Todd, vice president and executive engineer, Pacific Lighting Gas Supply Co.

The Section's Award of Merit also was presented posthumously to Robert W. Alexander of The Cincinnati Electric & Gas Co.

At the annual A. G. A. Home Service Breakfast, October 3, five gas utility

home service representatives received **Home Service Achievement Awards**. The awards are sponsored each year by *McCall's* magazine.

Bronze plaques and cash prizes were given to candidates selected on the basis of papers they submitted. Papers were judged in the light of their contribution to the advancement of modern homemaking by promoting the use of gas and gas-fueled equipment.

Winner in the division, which includes heads of departments of more than five members, is Lucile Boettcher, home service director of Laclede Gas Company. Her entry, "Custom-er Made Progress," tells the story of a homemakers' conference at the gas utility, which helped her company determine how it could best meet the personal needs of customers.

In the division covering departments of five members or less, the award went to Marie O'Brien, home service director of Providence Gas Company. Her entry, "We Serve Our Company, Customers and Community," reports on an effective general home service program conducted by Providence.

Individual awards also were presented to three members or heads of gas company home service departments. They include: Miss Carol L. Sellow, home service consultant with the Boston Gas Co.; Mrs. Muriel K. Miura, home economist, Honolulu Gas Co. Ltd., and Mrs. Evalyn Vaughan, division home economist, Pacific Gas & Electric Co.

During a telecast over the convention's closed circuit television system, a plaque expressing the gas industry's appreciation for the filming of "Gasarama" was presented to Noble D. Travis, director of public relations, Michigan Consolidated Gas Company.

Bruce A. McCandless, vice president, sales, Milwaukee Gas Light Company, and chairman of A. G. A.'s Educational Service Subcommittee, made the presentation to the creator of the "Gasarama" idea.

"Gasarama" was originally a stage production worked up by Mr. Travis to tour schools in Michigan Consolidated's service area. The stage show has also been presented at a number of gas industry meetings including last year's A. G. A. Convention.

The plaque read: "To Noble D. Travis of Michigan Consolidated Gas Company for his generous and unselfish cooperation in permitting 'Gasarama'

to be filmed for the use of the entire gas industry. October, 1961. American Gas Association."

In the area of safety, A. G. A. received the **National Safety Council's 1961 Association Safety Award**, and in turn presented 13 **Safety Achievement Awards** to gas distribution and pipeline companies.

E. C. McFadden, vice president, Texas Employers Insurance Association, and member of the board of the National Safety Council, presented the 1961 safety award to A. G. A. President Potter, and congratulated the Association for its "fine contribution to safety in industry."

Mr. McFadden said, "Your program not only deserves this recognition, but what you have done adds immeasurably to our knowledge of successful association safety work."

A. G. A. was cited for reducing disabling injury frequency 28.2 per cent over the last five years and for its continuing program of accident prevention.

This was the fifth time that A. G. A. has won the safety award.

A. G. A. Safety Achievement Awards, made annually to companies with the lowest employee accident frequency rates, were presented to:

No. of Employees	Natural Gas Companies
1501 or more	Baltimore Gas and Electric Co.
501 to 1500	Central Illinois Light Co.
101 to 500	Iowa Power and Light Co.
100 or less	Wisconsin Southern Gas Co. Inc.

Transmission Companies	
1501 or more	Texas Eastern Transmission Corp.
501 to 1500	New York State Natural Gas Corp.
101 to 500	American Louisiana Pipe Line Co.
100 or less	Commonwealth Natural Gas Corp.

Manufactured and Mixed Gas Companies	
1501 or more	Boston Gas Co.
501 to 1500	Citizens Gas and Coke Utility
101 to 500	Pennsylvania Gas Co.
100 or less	St. Augustine Gas Service, Inc.

Liquefied Petroleum Gas Companies	
	Sierra Pacific Power Co.

Gas heater looks good



Ruud Manufacturing Co. features a new line of gas swimming pool water heaters. The model (the heater) is rustless copper, reinforced with steel

Hamilton

(Continued from page 18)

past several years. Again, take the gas range as an example.

Ten years ago we just didn't have "built-ins" or "free-standing ranges with the built-in look." We didn't have top-burner-temperature controls or low-temperature settings for the oven. And we didn't have rotisseries, vertical broilers, meat probes, high input burners or a host of other developments which typify today's gas ranges.

And speaking of changes, let's go outside the gas industry. What's happened to the steam-driven locomotive and what's happened to the propeller-driven airplane? Already they belong to a by-gone era. Yet they were modern as recently as yesterday.

Today, we read about man-made satellites, intercontinental missiles and nuclear power. We read of these accomplishments and regard them as commonplace.

But as business men—men whose business it is to supply and service the public with fuel and appliances—we must ever remain aware of the impact these accomplishments will have on the demands of tomorrow's market.

Yes, gentlemen, we can talk all we want about the soaring sixties, the heavenly seventies or the years beyond—but they cannot be measured in terms of today's demands or today's appliances and equipment.

Because this is true, you and I and our gas industry have focused the spotlight on laboratory research.

Our research program, like all gas industry programs, is a cooperative program. Why?

Today's industry research is the key to our modernity of the future. There are not many individual companies in our gas industry who can carry on broad and penetrating research programs.

Sure, most of us have laboratories—but our individual research, by and large, is carried on with our own specific interests in mind. We are interested, primarily, in that which we can produce and sell.

As individual companies we do not get into the broad aspects of improved gas utilization. And, again individually, we cannot afford to carry out that broad and penetrating research which is essential to maintaining a strong gas industry.

We can accomplish this vital research only through the single expedient of

cooperative, gas industry research programs.

And, without these programs and their anticipated accomplishments, our gas industry could well run the risk of joining the steam locomotive and prop-driven airplane as a part of historical Americana. But that will not happen.

It will not happen because our laboratory research is geared to the changing demands of the more sophisticated markets of tomorrow.

Our researchers talk about fuel cells, thermionics and new dramatic utilization of gas as a fuel.

I believe you will see these new and dramatic achievements actually working as a part of the gas industry's exhibit at the coming 1964-1965 New York World's Fair.

This gas industry exhibit, I might add, will stand as another monument to gas industry accomplishment and achievement through cooperation.

Competition rough and tough

In this day and age, we hear a lot about the challenges of the future.

We hear a lot about the planned resurgence of oil as a household fuel.

We hear a lot about the galloping public acceptance of electric heating and the now reality, all electric home.

There are those who view these challenges as the beginning of an onslaught which will commit our murder through sheer weight of electric advertising and promotion, and through their superior abilities to spend money in electrically conditioning the market place.

That reasoning is faulty. It is faulty because it fails to recognize that we, ourselves, constitute a big and dynamic industry. It is faulty because it fails to measure the sum total of our competitive capabilities as a cohesive and unified industry.

As I said earlier, this gas industry of ours experienced its greatest growth during the 1950's.

You can talk all you please about accelerated competition of the soaring sixties—but the competition of the fifties certainly wasn't a Sunday school picnic either.

It was rough and tough. There were many well-publicized electric innovations introduced to the market. On top of that, I'd venture the opinion that the electric industry outspent the gas industry in advertising and promotion by at least five or six dollars to one.

Yet, we made our greatest strides during the decade of the fifties. We came to the end of the 1950's with gas clothes dryers and gas built-in ranges increasing their share of the market. And, as we looked back, we could see that almost eight out of 10 new homes installed gas heating equipment and gas water heaters—and we added new residential customers at the rate of more than a million a year.

Yes, the competition of the 1950's was rough and tough. We, the gas industry, did our part to make it rougher and tougher.

We had innovations of our own—gas air-conditioning, the rejuvenation of the gas refrigerator and gas lights, the introduction of gas-driven engines and a host of other developments which made us competitively capable and permitted us to keep our industry modern and on the move.

Yes, the tempo of competition will be quickened—but, let us take stock of the assets this gas industry possesses—

Many of the assets, gentlemen, were absent factors 10 years ago—today—

We have national TV programs;

Multi-million dollar print advertising programs; and

Multi-million dollar research programs.

We have demonstrated abilities to work cooperatively. And, as examples, I cite the Gold Star program, the GEM program, A. G. A.'s space sharing programs, and GAMA and A. G. A.'s public relations programs.

Cooperation best asset

It is this ability to work together towards the common objective of gas industry progress which is our greatest single asset. If you doubt it, ask someone in the oil or electric industry.

Our gas industry, over the past several years, has doubled and redoubled its advertising and promotional activities.

By and large—and with the exception of the Gold Star program, some space-sharing, and a few manufacturer contributions to our TV program, the gas utilities have made, by far, the greater contribution.

One thing I can say on behalf of all manufacturers is thank you for that.

But I believe we are fast moving towards the point where gas industry advertising budgets must be substantially increased.

I believe that the days are dead and gone when we could advertise gas for the seven big household jobs and let it go at that. We must shoot with a rifle and not with a shot-gun.

We must take dead aim on individual markets: the heating-cooling markets, the water-heating markets, the laundry markets, and so on.

This trend is already clearly evidenced in our national advertising.

But in many quarters, the manufacturer is not properly and adequately shouldering his share of the promotional burden.

He, the manufacturer, and I could list a dozen reasons why the utility should pick up the bill. You know the reasons—we make one sale and the utility takes in revenues for 20 years; and, there's very little profit in the sale of gas appliances and equipment.

Maybe these are good reasons—but building a strong industry of strong companies, both manufacturers and utilities, is a cooperative endeavor involving everyone.

I have high hopes that the gas heating equipment manufacturers, and manufacturers of other gas appliances

and equipment not now doing so, will soon be making contributions towards the advertising and promotion so essential to the welding of our industry into a stronger and more competitive striking force.

Frankly, I don't think there is any alternative.

Now, let's talk for just a moment about the selling aspects of our industry.

Over the past years we have learned that the appliance dealer is just what the term implies. He's a fellow who sells appliances, and he's more interested in turnover and profits than he is in the battle of the fuels.

We have been quite concerned over the attitudes of many appliance dealers—they just didn't seem to have any great degree of loyalty to the gas industry. Well, the typical dealer hasn't any great degree of loyalty to electricity either.

We've got the job of servicing the dealer—of making him want to sell gas appliances. This we can accomplish only by guaranteeing him turnover, profit and customer satisfaction.

We've got to learn more about the desires and needs of those who sell

and install our products.

And that, gentlemen, is a back-door approach to the subject of gas utility merchandising.

I know that some of our appliances and equipment, like air-conditioning, refrigerators and incinerators, need utility support and utility merchandising.

Other appliances, like dryers and ranges, need utility support, yes—but they also need the wholehearted sales efforts of appliance dealers and other retail outlets.

It seems to me that this entire matter of utility merchandising is a local-level, point-of-sale decision. A decision that calls for knowledge of consumers, dealers, and local economies.

But one thing is certain—and that is that sell or not—the gas utility cannot remove itself from the essential project of gas conditioning its franchise area. The dealer must, at least, be influenced to display our merchandise to prospective consumers. Achieving this, it seems self-evident that the dealer will be more interested in influencing an actual sale towards our fuel.

Advertising, public relations, consumer education, sales and merchandising programs, and dealer aids and incentives are essential to building strong companies and a strong industry. And that final accomplishment—the building of a strong industry—starts in your own back yard—your local area.

In conclusion, gentlemen, we have been talking about our industry, its objectives and its programs. And we have been talking about the cooperation that is so essential to keeping our industry competitively alert and competitively capable.

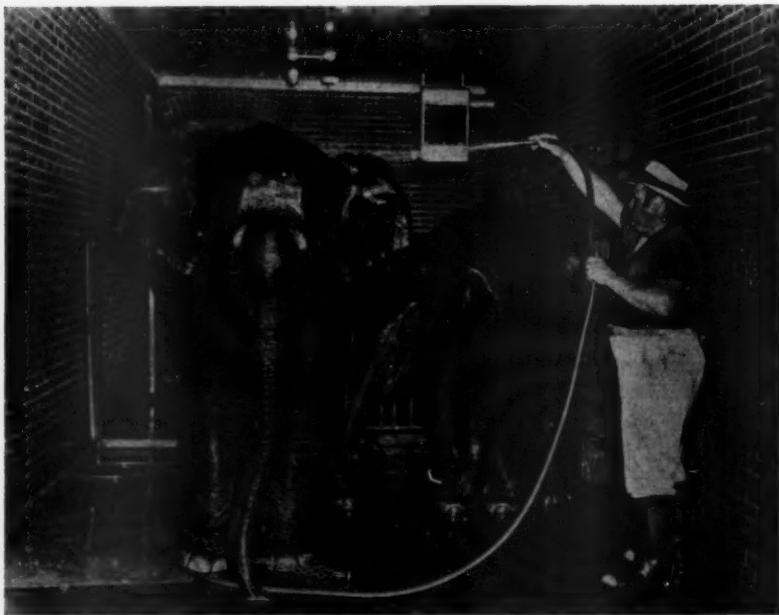
In effect, we have been asking you to be selfish—to look at these opportunities and ask: "What's in it for me?"

There is only one answer.

Cooperation, unity, singleness of purpose and mutual manufacturer-utility objectives—these are our tools of achievement. These are our sole means of keeping our gas industry alive, vibrant and on the move.

Accomplish this, gentlemen, and we'll move into the future without loss of the momentum which so characterized the 1950's.

Gas keeps elephants clean and happy



Elephants, too, are kept clean and fresh by gas hot water heaters. In this case, nine thousand pounds of Tessie and Peggy are hosed down with 100 gallons of bath water, supplied by a Ruud Sanimaster commercial gas water heater. This gas service is provided at St. Louis' Grant's Farm Zoo

Prentice

(Continued from page 18)

is the principal market for the appliance industry. And it is the key market for the gas industry.

This market is as fast-changing as it is tough and competitive and rich and big. And it is a market the gas utilities can't afford to lose, because if you don't sell gas into the house while it is being built the chances are two to one you will never get it in; or to put the same thought more positively, the critical moment for selling gas and gas heating and gas hot water and gas refrigeration and gas cooking and gas incineration and gas cooling often comes six months before the house starts being built and not after, because that's when the decision to provide for gas or not to provide for gas is apt to be made.

It's a market you can't afford to lose, partly because so large a percentage of all the gas appliances and gas furnaces sold are sold into new houses, and partly because how well you sell the new house market from year to year will determine how much of the total residential market you will hold—and 40 per cent of all the gas utility profits come from residential sales.

If you want to sell the new house market against the stepped-up competition of electricity and the revitalized competition of oil, you will have to find an easier way to sell than just spending millions of dollars to hire salesmen or spending millions of dollars for buckshot advertising to everybody.

You are going to need help. Specifically, you are going to need help of all the professionals in the housing industry who hold the key to the new house market. If you sell them on gas, they will do most of your selling for you. If you don't sell them, somebody else will—and then they'll sell gas out instead of selling gas in.

First, the new home market is in the hands of the professionals whose job it is to plan and design the houses and write the specifications—some of them architects, some of them not. The architects are playing an increasingly important part in the built-for-sale house market, which is 83 per cent of the total new house market. They are by far the biggest factor in the custom house market that sets most of the trends the built-for-sale

market follows a few years later. And when we polled a cross-section of *Life* advertisers to find out whom they try to pump for free advice on big-ticket items to go in the homes they buy or remodel, the architect came out first by a very wide margin.

Second, it's in the hands of a few thousand merchant builders, by which I mean builders building houses on their own land with their own money for sale to an unknown buyer, the merchant builders who now build five new houses out of six.

Rent-free showrooms

The best figure we can get by polling all the local chapters of the National Association of Home Builders is that there are 28,079 merchant builders all told—big, little, intermediate and giant—and you sure enough need the help of those 28,079 merchant builders if you are going to sell gas into the homes they build. Most particularly, you need the help of the three or four thousand merchant builders who are big enough to afford a \$10,000 to \$15,000 promotion to get the crowds out to see their furnished model homes. Those model homes are the finest rent-free showroom any manufacturer could want, because—according to the Politz study for *Look* magazine—39,000,000 different adults shop those model houses each year. Of those 39 million, a little over a million will buy a new home. The other 38 million will just go home with new ideas for making their old homes better and settle for a new roof or better kitchen or a new heating system.

If those 39 million see gas cooking and gas heating and gas cooling and gas refrigerators and gas incinerators in those model houses, those 39 million consumers will associate gas with what's new and better. If they don't see gas in those new homes, you can't blame them if they unconsciously think gas is old hat.

Third, you need all the help you can get from the mortgage lenders who put up 90 per cent of the money to pay for all this year's new houses—the mortgage lenders to whom—in the words of Housing's number one economist Miles L. Colean—"All new houses, and everything in those new houses, must be sold first before the builder can even start to build the house to sell it to a consumer." And most particularly, you need the

help of the appraisers who pass judgment for the lenders on all those new houses and all the products in those houses. That appraiser may be on the lender's payroll. He may be on the payroll of FHA or VA. He may be an independent fee appraiser, in which case he is almost sure to be a realtor doubling in brass. But whoever he may be, nobody can sell anything into any built-for-sale house unless the appraiser will give full credit in his valuation. And I'm sure it is no secret from you that the electric utilities are making the lenders and the appraisers the No. 1 target of their electric heat promotion, because until the lenders and appraisers are ready to give houses with electric heat the same appraisal and the same financing as homes heated with gas, you don't need to worry much about builders deserting gas for electric heat.

Home salesmen sell gas

Finally, there are the salesmen who sell the houses and the sales managers who are the all-important go-between between those salesmen and the merchant builders. Those salesmen may work on the builders' payroll. More often they work on the payroll of an independent realtor. And I bring you the words of famed builder Alan Brockbank, past president of the National Association of Home Builders and founder of its Research Institute: "The most important man to have sold on your product is the salesman who is with the customer when he is making up his mind to buy. If that salesman is sold on your product, he will make your product a talking point to sell the house. If he is not sold on your product, he will be careful not to mention it."

There are perhaps 10,000 of these salesmen now, because in today's tough selling market very few houses are sold unless some salesman sells it. In a very literal sense, they are the only salesmen you can have at the point-of-sale to sell gas and gas heat and gas cooking and gas hot water and all the other uses of gas in the new house market. It would cost you close to \$100 million a year to hire them to do this selling job on your payroll. But their services are yours for free if you do a good enough job selling them what you want them to sell for you.

The man who plans the house, the man who builds the house, the man who puts up the money to pay for the house,

the man who appraises the house and sets the price for the house and everything in that house and, finally, the man who sells the house and everything in the house—the man who is your industry's only face-to-face contact with the new-house buyer—these men could and should be your second sales force to sell gas and gas heat and gas cooking and gas cooling and gas refrigeration and gas incineration in the new house

market.

If you don't get their help, you haven't money enough to sell this enormous new house market. If you get their help, they'll do half your selling for you.

So the smartest electric utilities and the smartest gas utilities are organizing to get their help. They are hiring special salesmen, and in the big cities they are hiring teams of special salesmen, to sell gas to the architects and designers; they

are hiring special salesmen to sell gas to the lenders and appraisers. They are hiring special salesmen to sell gas to the builders. They are hiring special salesmen to sell gas to the salesmen who sell new houses—and new house equipment—to consumers, because they want to use the architects and the builders and the lenders and the appraisers and the realtors as their second sales force to sell gas to the public.

Home service

(Continued from page 21)

certified home improvement centers with equally interesting results. Among the questions asked was one which required the home improvement center to indicate, by months, the most popular of the several home improvement projects they had undertaken.

"Consistently the most popular project was that of remodeling the kitchen. In each of the 12 months of the year, remodeling the kitchen was among the top five projects in popularity. This is near and dear to the heart of every home service girl. Also near and dear to your hearts are these other projects—the addition of a bathroom, the modernization or finishing of a basement, adding a room or wing, converting a garage into living space, or even building a patio or porch.

Any one of these could conceivably add gas load through heating, water heating, an outdoor barbecue, a gas lamp, or even infra-red heating for an outdoor patio.

"In many communities around the country the home improvement market is being exploited more and more by aggressive contractors, lumber dealers and others both well established and new to the field. These people are most receptive to the slightest interest or promotional help from the utility companies. We have learned this from actual experience in Milwaukee.

"Some of our people have been instrumental in establishing in Milwaukee a Home Improvement Council chapter and in upgrading the public's impression of home improvement contractors. This is one way in which you, too, can let the home improvement contractors and other interests know that you are interested in the business. It also helps if you have a really promotion-minded home service department, a promotion-minded kitchen-laundry planning de-

partment, a promotion-minded builder department and, over-all, a promotion-minded company! !

"Across America, in your town and mine and for every new home built, there are over 40 homes which are in need of some form of modernization. We hope to constantly increase the volume of home remodeling in our service area, and to get our share of the new gas load. And let me add the prayer that there may be steady improvement in your figure, too—the profit figures that can result from home remodeling."

The simple but almost lost art of selling was the theme of a talk entitled "This Age of Leaners," by Jessie Cartwright, director of home economics for the Norge Appliance Corporation.

Miss Cartwright opened her remarks by complimenting the "alert, dynamic, forward-looking" group in the audience on their tremendous contributions to the gas industry but added that selling is a continuing effort requiring cooperation and effort all along the line.

"I recently came upon a wonderful, inspiring, knowledgeable article in the *New Yorker* magazine called 'What's New in the Home.' I am sure that you must have read it with pride and delight as I did—this well written, enthusiastic and astonished article about the wonders of our modern gas range. The author is excited about the fact that today there are these amazing new developments—the low-temperature oven control burner with a brain, automatic oven, and so on.

"My word! You and I have known and loved these features for several seasons. Yet, apparently, they are still news in many quarters. I am delighted that this article appeared, and it occurs to me that perhaps we should be doing more shouting from the housetops about our marvelous blue flame appliances. Have we perhaps been guilty of leaning?

"Selling is essentially such a simple thing, yet selling has become an oner-

ous, difficult, discouraging, unsatisfying way of life for so many people today. We hear it on all sides. The art of salesmanship is dead; nobody knows how to sell; nobody cares.

"I have decided that this—with a few notable exceptions—is because we live in an age of leaners who take leaning as a way out of the complexities of modern living. We lean on psychiatrists, on college degrees, on being an organization man, on the team and on pushbuttons, service men and appliances!

"Selling need not be difficult, and it can be extremely rewarding. All great salesmen follow these four basic rules:

- "1. They know their product.
- "2. They believe in it thoroughly and in what it will do for their customers.
- "3. They have to tell their story to anyone who will listen.

"4. They know and use their product."

"That's all there is to selling—you have to tell the story—all of it—believe in it and widen your audience constantly.

"For you and me this means standing straight with the blue flame torch held high so that its power and service to all people will be known around the world."

Mildred R. Clark, home service supervisor, Oklahoma Natural Gas Company, also gave a talk, "Cues to Q's."

Miss Clark listed 13 "cues" for the home service girl to help her in the development of sales and services on behalf of the gas industry. These sales and increases in the use of gas are the "Q's" of her talk. They are "quality and quantity."

In her own company, Miss Clark noted that the employment of one excellent dietitian makes it possible for the home service department to perform many unusual services and set up a variety of special programs. Among the cues Miss Clark mentioned were: work with hospitals and institutions; help with school lunch programs, and keep employees informed of new gas equipment installations.

New film star is old star for gas

THE BRIGHTEST new Hollywood star since James Dean has been starring for gas since mid-1960.

Actor Warren Beatty, whose recently released picture, "Splendor in the Grass," is receiving rave notices, has a feature role in the gas industry's cooking film, "Do Come to Dinner."

The half-hour, full-color home service movie tells the story of a teenage girl's cooking experience, when she writes a fan letter to Beatty and invites him to dinner. With the

help of home economists and gas cooking, the teenage hostess wows the Hollywood star.

"Do Come to Dinner" is designed for teenage audiences and is a cooperative effort by a host of participants including A. G. A., *Living for Young Homemakers* magazine and The Brooklyn Union Gas Company.

Prints of the film may be ordered from the A. G. A. Home Service Department, 420 Lexington Avenue, New York 17, N. Y.

Prices are \$285 for the first print, and \$250 for each additional print.

Ceremonies held as largest city in largest state gets natural gas

NATURAL GAS came officially to Alaska on September 30.

At formal ceremonies, the Anchorage Natural Gas Corporation and the Alaska Pipeline Company marked the inauguration of natural gas service, and the completion of an 81-mile pipeline from local fields to the largest city in Alaska.

Alaska Governor William A. Egan was featured speaker at the ceremonies. Following dedication of the facilities, Robert B. Baldwin, president of both Anchorage Natural Gas Corporation and Alaska Pipeline Company, and Dale Teel, executive vice president and general manager of Anchorage, presided at the lighting of a perpetual gas torch on the city hall lawn. George Byer, mayor of Anchorage, presented Mr. Baldwin with a plaque to commemorate the arrival of natural gas, and Ken Sheppard, vice president, Alaska Pipeline Company, acted as master of ceremonies.

The Anchorage ceremonies were the final touch to an effort that began early in 1959. At that time Robert Baldwin left Houston, Texas, for Alaska, and formed the Anchorage

Natural Gas Corporation.

The company was organized on the basis of plans for serving Anchorage with manufactured gas or a propane-butane mixture shipped in from the West Coast. But in the midst of its franchise election campaign, a gas strike was made at nearby Kenai Peninsula. Gas flow from the well was quickly determined to be more than adequate to supply Anchorage for the next 20 years. The franchise was approved. The Alaska Pipeline Company was formed. Construction was begun on the Kenai-Anchorage pipeline. Anchorage itself was dug for its new gas distribution system.

The entire story was featured in the September, 1960, issue of the MONTHLY.

Since then more than \$16 million has been invested in the transmission and distribution facilities. Alaska Pipeline Company now receives natural gas from three wells, each of which is completely equipped with dehydration and regulation equipment which is essentially automatic in operation. The company has installed microwave radio communications between Anchorage and the operating headquarters at Kenai.

While these production and transmission facilities are entirely suitable for operation, additional work of various kinds is still in progress. Fences and mile-markers are being installed along the route of the pipeline, and painting and general clean-up of the right-of-way is in progress.

Natural gas found at the Kenai wells is practically pure methane, and as such is ideally suited for delivery into the pipeline. Gas pressure at the wells is better than adequate, and no problems are presently involved in transporting it to Anchorage.

The natural gas wells have not yet been put into continuous operation, but deliveries from the pipeline to Anchorage Natural Gas Corporation have been made continuously since August 14. These deliveries are being made from the reserve storage which was accumulated in the pipeline during the time of high pressure testing.

The pipeline is tested and certified for operation at pressures more than twice as great as are expected to be actually used during the early phases of the company's operations, and is considered adequate for the future.

PCGA officers elected at convention



PCGA officers. From left to right: R. D. Scott, managing director; S. L. Sibley, 1st vice president; W. J. Bailey, new president; H. G. Dillin, outgoing president; A. R. Bailey, 2nd vice president; L. W. Coughlan, treasurer, and J. E. Kern, director of manufacturers services

'Frozen earth' holds gas

A REVOLUTIONARY "frozen earth" process for storing liquid gases in a covered hole in the ground, at super-frigid temperatures of minus 258 degrees Fahrenheit, was introduced recently by Conch Methane Services Limited, London, and Constock-Pritchard Liquefaction Corporation, Kansas City, Mo.

The demonstration was held at a site southwest of Lake Charles, La., and was called "Operation Mudpie." It was witnessed by approximately 50 of the country's leading gas utility and gas transmission firm executives and editors of oil, gas and business journals.

A completely new concept in underground storage of low-temperature liquid methane, the process involves freezing the ground surrounding the area to be excavated, excavating the hole, and then installing a vapor-tight sealed aluminum roof over the hole before filling. According to the demonstrating firms, advantages over above-ground storage are safety and lower cost.

At the Lake Charles test site, the ground was pre-frozen by circulating a refrigerant through a circle of pipes buried 30 feet deep. When the frost boundary moved inward to the cavity wall radius, excavation was started.

The hole was dug 20-feet deep, with a 20-foot diameter cavity, and a capacity of 850 barrels.

Gas air conditioning looms large in California

ONE OF the largest gas air conditioning systems ever planned for strictly residential use in southern California will be installed in a six-floor, 22 unit luxury apartment project in Santa Ana, Calif.

Southern Counties Gas Company will supply fuel.

A two million Btu gas-fired hot water boiler and a Carrier Automatic Absorption Machine will be used for heating and cooling the Tamerlane apartment project. Additionally, the hot water boiler, through a heat exchanger, will be used to provide hot water for the entire building. Also included in the central air conditioning equipment will be a Drayer-Hanson cooling tower.

The air conditioning system in the individual residential units will be controlled by

Minneapolis-Honeywell two-zone pneumatic controls, which permit simultaneous heating in one room, and cooling in another. Carrier air handlers, with over-size coils, will be installed in each apartment.

A three-pipe system—one for hot water, one for cold water, and a common return—will be utilized throughout the building. The air conditioning system piping is being placed in triangular shafts, along with all other building piping. The piping cavities will be sealed with foamed polystyrene, rather than individually insulating each pipe. The building itself it being built with post-tensioned, pre-cast lift slab concrete. When completed, it will be the highest structure in Orange County to be built with this type of construction.

Lights out—gas in

NATURAL GAS proved its dependability once again recently, this time at the annual festival of the Masonic Lodge in Pomona, Calif.

As the 350 ticket holders were being seated for the lodge's variety show, all the electric lights in the building suddenly went out.

After a few moments of bedlam, a lodge member remembered that the old, original gas light fixtures on the auditorium walls were still connected. The gas lamps were quickly lit, and the audience was seated in an orderly manner.

The show started on time, with the auditorium illuminated by the soft glow of gas lights.

New facilities planned

TRANSCONTINENTAL Gas Pipe Line Corporation has filed an application for a certificate from the Federal Power Commission to build \$49 million of new facilities.

E. Clyde McGraw, Transco president, said that the new facilities would enable an increase of 93,405,000 cubic feet per day in deliveries of natural gas to 32 existing resale customers in nine states.

Mr. McGraw said that the largest part of the proposed construction would consist of 188 miles of 36-inch-diameter main line pipe laid parallel to the existing Transco system in Louisiana, Mississippi, Alabama, Georgia, the Carolinas, Virginia, Maryland and Pennsylvania.

1,200 homes get gas lights

ONE OF NEW JERSEY'S largest housing communities, the 1,200-home Brookwood development in the Lakewood area, will feature gas street lighting and gas for food services in each home.

The builder, Robert J. Schmertz, has completed more than 2,000 homes in central New Jersey and has been a big booster for gas. In his latest development, Mr. Schmertz worked with William J. Miners, general sales manager, New Jersey Natural Gas Company, to arrange a Whirlpool Corporation package deal, with gas cooking, for each kitchen.

In addition gas will be used for central heating, water heating and clothes drying.

The final gas touch will be supplied by street lighting. Mr. Schmertz has already installed 19 gas lights in the model homes and two at the gates leading into the development.

He has even included a sketch of a gas light as part of the Brookwood insignia.

Gas cleans Oakland's air

A MULTIPLE CHAMBER incinerator, equipped with an auxiliary gas burner, has reduced pollutants from 1200 lbs. per month to about 100 lbs. and eliminated visible plume at a wire and metal salvage operation in Oakland, Calif.

On a special tour organized by the Bay Area Air Pollution Control District, over 40 representatives of city and county governments, public health departments and newspapermen saw a dense column of smoke at the Lakeside Junk Company abruptly eliminated by the \$10,000 incinerator.

As part of the program of air pollution control, many municipalities have approved use of new, improved smokeless-odorless gas incinerators.

Gas service extended

NORTHERN NATURAL GAS COMPANY of Omaha has filed an application with the Federal Power Commission in Washington for authority to extend gas service to 65 new communities in four states during the coming year, at a cost of \$11 million.

The 1962 expansion program proposes service to 44 communities in Wisconsin, 17 in Minnesota, three in Iowa and one in Nebraska. Northern seeks authority to sell natural gas to each of these new towns at wholesale for distribution by the local retail gas utility.

New oven control offered

A NEW OVEN CONTROL SYSTEM, combining an improved version of the "Flame Master" gas oven thermostat with an automatic time control to provide "convenient cooking" for the housewife, has been developed by the Robertshaw Thermostat Division of Robertshaw-Fulton Controls Company.

Under the new system, a time control will automatically reduce the oven from its cooking temperature to an optimum serving temperature. Once the cooking has been completed, the oven cuts back to a lower setting

A. G. A. approved incinerators now in Moncrief line



The Henry Furnace Company of Medina, Ohio, has added a new A. G. A. approved smokeless, odorless incinerator to its Moncrief line. The new unit is equipped with an automatically timed burner, and has the capacity to quickly and quietly dispose of up to 1½ bushels of burnable refuse

3,065 gas lights sold

IN THE FIRST three weeks of a recent campaign, employees of The Gas Service Company, Kansas City, Mo., sold a total of 3,065 gas lights.

Individual leader in sales was Lyle Fishback, a meter reader. Mr. Fishback sold 57 gas lights by telling customers about special prices and free replacement of mantles. He also stressed the fact that there is no interest, nothing down and no carrying charge.

Close behind Mr. Fishback in the competition were Charles Sims, a night mechanic (55 sales), and Leroy Helm, an appliance installer (51 gas lights).

The campaign was being continued.

Suppliers elect officers

THE GILD OF ANCIENT SUPPLERS held its annual meeting in Dallas, Texas, October 1, the first day of the A. G. A. Convention, and elected as its president Wayne H. Bovee, division sales manager of the Hardwick Stove Company, Dallas.

Mr. Bovee succeeds Karl W. Schick of the Minneapolis-Honeywell Regulator Company.

Other officers chosen were: senior warden, Lee A. Brand, vice president, Empire Stove Co., Belleville, Ill.; keeper-of-the-treasure, Leslie B. Moxon, vice president, Joseph Scholl, Inc., Philadelphia, Pa.; clerk, William B. Ashby, secretary, American Meter Co., Philadelphia.

Initiated as honorary members were two managing directors of regional gas associations: Clark Belden, New England Gas Association, and Robert R. Suttle, Southern Gas Association.

Gas turbines planned

DELAWARE POWER & LIGHT COMPANY plans to install two gas turbine generating units at an estimated cost of \$2,250,000.

One of the units, a General Electric with an electric generating capacity of 11,700 kilowatts, will be placed next to the company's south Madison Street substation. The other unit, a Pratt-Whitney, having an electric generating capacity of 12,900 kilowatts, is presently scheduled for installation at the Edge Moor Power Station and will utilize a jet engine.

Caloric changes name

CALORIC APPLIANCE CORPORATION has changed its name to Caloric Corporation.

"The new name has been selected to reflect Caloric's current diversification of product lines, especially in the architectural metals field," said Julius Klein, company president. "It does not in any way indicate less emphasis on gas appliances, the foundation of the company, but rather shows the growth of the Caloric organization in other fields."

Caloric, with manufacturing facilities at Topton, Pa., and executive offices in Wyncote, Pa., is a producer of gas kitchen appliances.

Its product line includes ranges, sinks, ventilating hoods and gas disposers.

Memorial marks historic gas well



The Haymaker Well, largest gas well in western Pennsylvania—in 1878 it "blew in" with an open flow of 34 million cf of gas per day—is now marked by a memorial. On site are: C. Payne, Jr., chairman, Pennsylvania Natural Gas Men's Association Memorial Committee; J. T. Galey, PNGMA president

SGA produces film strip on gas turbines

A COLOR-SOUND filmstrip, which describes the use of a gas turbine power package to supply all the energy requirements of a compactly designed secondary school, will soon be available from the Southern Gas Association.

A project of the SGA Heating and Air Conditioning Committee, the filmstrip is patterned after findings published in the SGA-A. G. A. research report, *A New Look at New Schools*, and will be ready by January 1, 1962.

The film will highlight the many features of the completely air conditioned secondary

school—flexibility, controlled environment, convenience, freedom of teaching, high frequency lighting—while stressing that the gas turbine power package helps make possible all these advantages at less first cost and lower operating cost.

Purpose of the film is to bring this new approach to the solution of the problem of economy and flexibility in school facilities to the attention of school boards, educators, PTA groups, Dads' clubs, civic and professional organizations and other interested groups.

Information on ordering will be announced as soon as the filmstrip is available.

Arkla, Southwest merge

THE MERGER of Arkansas Louisiana Gas Company with Southwest Natural Gas Company, both with headquarters in Shreveport, La., was consummated October 2, effective as of the close of business Saturday, September 30.

Officials of Arkla said that operation of the former Southwest properties and service to some 45,000 former Southwest gas customers in three states will be continued by Arkla without interruption, and no changes in personnel are planned.

Approximately 4,000 stockholders of Southwest Gas will receive one share of Arkla common stock for each five shares of Southwest common. A total of 292,013 shares will be issued by Arkla in exchange for five times this number of Southwest shares outstanding.

Also acquired by Arkla in the transaction are two wholly owned subsidiaries of Southwest Natural, Rocky Mount Gas Supply Company and Southwest Natural Production Company, both engaged in oil and gas exploration and production.

Civil War sells gas lights



Union and Confederate teams sold 543 gas lights during East Ohio Gas Company campaign. G. Reid, T. J. Noonan drew prize-winning names

Highlights of cases before the Federal Power Commission

Bureau of Statistics, American Gas Association

Certificate cases

● **Ohio Fuel Gas Company** has been authorized to replace approximately 19 miles of smaller diameter pipeline with larger pipe, in order to increase peak day deliverability capacity from 91.8 to 128.3 million cubic feet of natural gas. These facilities, at an estimated cost of \$946,000, will assure adequate service to Ohio retail customers during the 1961-62 winter season.

● **United Gas Pipe Line Company** has filed an application for approval of a 40-mile pipeline loop of its existing Mobile, Ala.-Pensacola, Fla., line at a cost of about \$3.9 million. These facilities would be used to deliver an additional 50 million cubic feet of natural gas to existing direct industrial and resale customers on the 1962-63 peak day. Another application proposes the construction of a 10-mile loop-line in Louisiana at a cost of \$1.9 million to make available the major increase in reserves which have been developed in the Turtle Bayou area. During the last three years, deliverability from these reserves has increased from 100 to 353 million cubic feet daily. The company also filed two budget-type applications with the FPC. The first application proposes minor routine facilities to serve new direct industrial customers. These facilities will not exceed a total cost of \$750,000 and individual projects will be limited to a cost of \$200,000. The second budget-type application includes facilities to

render temporary direct natural gas service to not more than 25 industrial customers in Alabama, Florida, Louisiana, Mississippi and Texas.

Rate cases

● **Alabama-Tennessee Natural Gas Company**, in a decision filed by Presiding Examiner Law, had the level of four wholesale annual natural gas rate increases reduced. Three of the increases, totaling \$385,000, involve locked-in periods between December 15, 1954, and April 4, 1960. The fourth increase, amounting to \$515,900 on an annual basis, became effective April 5, 1960. The examiner allowed rates of return of 6 per cent for the first two periods and 6.25 per cent for the third period, the same as requested by the company in the original applications. In the fourth application, the requested 6.5 per cent return was reduced to 6.4 per cent. At the hearing, rates of return claimed by the company ranged from 6.46 to 7 per cent. The reductions made by the examiner resulted from lowering certain commodity and demand rates originally proposed by the company.

Among other FPC actions, The Manufacturers Light and Heat Company was authorized to sell its retail distribution and certain other facilities in Pennsylvania to the affiliated Columbia Gas of Pennsylvania, Inc. This is another step in the realignment of Columbia Gas System properties whereby each operating subsidiary will be subject to regulation by only one regulatory agency. Following an earlier denial and a subsequent application for a rehearing, Tennessee California Gas Transmission Company and California Gas Transmission have been allowed to intervene in the Rock Springs case. Both com-

panies, subsidiaries of Tennessee Gas Transmission Company, propose to transport natural gas for Southern California Edison Company. The Edison company is one of the largest customers of Southern California Gas Company, a major beneficiary of Rock Springs project. The El Paso Natural Gas Company now must produce evidence proving the economic feasibility of the project should the Edison company cease to be a customer of Southern California Gas Company.

In another action, a revised winter allocation plan submitted by Panhandle Eastern Pipe Line Company, and subsidiary Trunkline Gas Company has been accepted on a temporary basis. An additional 125 million cubic feet of natural gas per day has been allocated to resale customers in proportion to their needs, based upon their space heating saturation on January 1, 1961. Pending final action on certificate applications involving eight million cubic feet daily for new service to 14 Illinois and Kansas communities, Michigan Consolidated Gas Company was awarded this quantity on an interim basis. Presiding Examiner Marsh declined to order Alabama-Tennessee Natural Gas Company to render service to the City of Muscle Shoals, Ala. Both the pipeline and the examiner agreed the municipal project was not economically feasible.

SUMMARY OF INDEPENDENT GAS PRODUCER RATE FILINGS—AUGUST, 1961

	Number	Annual Amount
Tax rate increases allowed without suspension	1	\$ 342
Other rate increases allowed without suspension	31	250,646
Rate increases suspended	35	584,725
Total rate increases	67	835,713
Tax rate decreases allowed without suspension	—	—
Other rate decreases allowed without suspension	6	18,991
Total rate decreases	6	18,991
Total rate filings (all types)	568	—
Total rate filings acted on from June 7, 1954 to Aug. 31, 1961	56,423	—
Rate increases disposed of after suspension (during month)	13	2,477,324
Amount allowed	—	2,473,529
Amount disallowed	—	—
Amount withdrawn	—	3,795
Rate increases suspended and pending at end of month	3,874	\$165,719,593

SUMMARY OF PIPELINE COMPANY RATE FILINGS—AUGUST, 1961

	Number	Annual Amount
Increases under suspension at beginning of month	99	\$399,025,700
Increases suspended during month	—	—
Increases disposed of after suspension	—	—
Amount allowed	—	—
Amount disallowed	—	—
Amount withdrawn	—	—
Increases allowed without suspension	—	—
Increases suspended and pending at end of month	99	\$399,025,700

SUMMARY OF PIPELINE COMPANY CERTIFICATE FILINGS—AUGUST, 1961

	Number of Applications	Miles of Pipeline	Compressor Horsepower	Estimated Cost
Pending at beginning of month*	181	6,341	545,778	\$761,574,815
Filed during month	23	83	1,320	10,389,878
Issued during month	16	359	54,260	28,135,499
Otherwise disposed of during month	1	—	—	—
Pending at end of month	187	6,065	492,838	\$743,829,194

* Adjusted to include amendments and supplements to applications and modifications of certificates.

Propane stored down under



Down 400 feet to liquid propane storage cavern go M. J. Pfeiffer, Cincinnati Gas and Electric Co., and Judge C. L. Cropper, Boone County, Ky.

American Gas Association lists new publications for November

ACCIDENT PREVENTION

- Suggested Safe Practices for Manufactured Gas and Stand-By Plants. Mimeographed book. 40 cents each. Cat. No. 50/AP.
- Warn, Guide, Protect. 35 mm color sound slide film. \$30.00. Cat. No. 51/AP.
- Load Binders and Lever Hoists. 35 mm black and white slide film. \$10.00. Cat. No. 52/AP.
- Gasline Gus Posters. (Gas industry poster sets) 7th series. 12 safety posters in sets. \$1.25 per set. Cat. No. 3/AP/61.
- Safety Flipchart #12—Read em Safety. One chart, \$14.00; 2 to 9, \$12.50 each; 10 or more, \$12.00 each. Cat. No. 36/AP/61.

GENERAL MANAGEMENT

- Suggested Program of Prevention of Damage to Underground Gas Facilities. A Claims Committee report. 25 cents a copy. Cat. No. 51/G.
- Principal Points in Investigation of a Gas Main Leak. A Claims Committee report. 25 cents a copy. Cat. No. 52/G.
- Reducing Claim Pay-Out by Effective In-

vestigation. A Claims Committee report. 25 cents a copy. Cat. No. 53/G.

- The Power of Eternal Values, by Dr. W. M. Tate. A convention paper. Free. Cat. No. 54/G.

HOME BUREAU

- Blue Star Promotion Kit. 75 cents. Cat. No. 54a/K.

OPERATING SECTION

- The Integration of Automation in the Gas Industry, by Neal B. LauBach. A convention paper. Free. Cat. No. OS-61-1.

PREMIUMS & PRINTED MATERIALS

- 10 Features That Add Up to Year-Round Comfort—Yours with Gas Air Conditioning. Consumer booklet. 1 to 999 copies, 4½ cents each; 1,000 to 9,999, 4¼ cents each; 10,000 and up, 4 cents each. Cat. No. 8a/GD.
- The 10 Most Wanted Features of Modern House Heating—Yours with Gas. Consumer booklet. Same prices as above. Cat. No. 4a/GD.

PROMOTION

- 1962 A. G. A. Plan Book. The Plan Book of residential advertising, promotion and merchandising. \$1.00 each. Cat. No. 93/P.

PUBLICATIONS

- 1960 Proceedings. Official record of the 1960 A. G. A. Convention. \$3.50 to members. \$7.00 to non-members. Cat. No. 3i/PB.

RESEARCH

- Soil Adsorption of Odorant Compounds, IGT Research Bulletin No. 33, by P. B. Tarman and H. R. Linden. \$3.50. Cat. No. 54/OR.

STATISTICS

- Monthly Bulletin of Utility Gas Sales, June, 1961, July, 1961. By subscription. \$1.00 per year. Cat. No. 60/S-61-6; 60/S-61-7.
- Quarterly Report of Gas Industry Operations, 1961, first quarter. By subscription. \$1.00 per year. Cat. No. 64/S-61-1.

SGA convention, A. G. A. conference to be combined

THE 54TH ANNUAL convention of the Southern Gas Association to be held in Houston next April 30, May 1-2, will be combined with the American Gas Association Spring Transmission Conference.

This will mark the first effort to combine two major industry meetings in the SGA region, and an attendance of 2,800 is anticipated.

Both groups will alter the format of their customary meeting in order to make it possible for all in attendance to take advantage of the combined meeting sessions.

At a recent meeting, the General Convention Committee, chaired by John C. Dezelle, vice president, United Gas Corporation, voted to invite Senator Barry M. Goldwater to address the opening General Session which will be switched to the first day of the convention.

SGA will not hold its customary Human

Relations and Accident Prevention Sessions in favor of a Tuesday morning session for operating personnel. Two speakers for this session will be provided by SGA—one on employee relations and the other on accident prevention—and the A. G. A. Transmission Committee will select the other two speakers for this session.

Howard M. Joiner, Peoples Natural Gas Company, chairman of the A. G. A. Transmission Committee, said one of the speakers for the Operating General Session likely will be J. Lewis Powell, consultant for the Department of Defense and well-known lecturer, who addressed the A. G. A. Management Conference in Charleston, S. C.

With an eye on the future, the SGA Heating and Air Conditioning Committee will arrange an exhibit of fuel cells, thermoelectric generators and other devices for the conversion of gas to electricity.

Research on gas odorants, flame reported

ODORANTS in natural gas, and the behavior of its flame, are the subjects of two new Institute of Gas Technology research bulletins.

IGT Research Bulletin Number 33, *Soil Adsorption of Odorant Compounds*, by P. B. Tarman and H. R. Linden, discusses the results of laboratory studies of the rate and extent of removal of odorants from natural gas as it passes through soil.

Bulletin Number 30, *Burning Velocities of Hydrocarbon Flames*, by S. A. Weil, covers a study directed toward understanding and predicting the behavior of the common gas flame.

Bulletin Number 33 details the effects of operating conditions on the adsorption of tertiary butyl mercaptan, methyl mercaptan, ethyl

sulfide and thiophane. Inlet sulfur concentrations were approximately 0.1 and 1 grain per CCF of gas, 60 degrees F, atmospheric pressure, and flow rates were 500 to 11,500 SCF per cubic foot of soil per hour.

The adsorbents were stationary beds of montmorillonite, illite and kaolinite clays, peat moss and Ottawa sand, all screened to a narrow range of particle sizes.

In the research described in Bulletin Number 30, Bunsen-type flames were used, because they are of greatest interest to the gas industry. (The multipoint burner is a collection of small Bunsen flames.) Among the fuels used were methane, propane, ethylene and hydrogen, and binary mixtures of them.

Both studies were sponsored by the American Gas Association under the PAR Plan.

Maytag has new building

MAYTAG COMPANY has opened its new headquarters building located in Newton, Iowa.

Two 331-ton compressors are used in the air-conditioning system to send both hot and cold air in separate ducts to 261 points of dispersion, where it is mixed as necessary to provide the proper temperature. Transistorized automatic controls at each dispersion point provide necessary regulation of air mixture.

Gas lights have personality



A new gas-lighted personal marker has been developed by Arkla Air Conditioning Company. Sign can be mounted on walls or gas light posts

Personal and otherwise

Pipelines name three

THREE VICE PRESIDENTS have been appointed at Michigan Wisconsin Pipe Line Company and American Louisiana Pipe Line Company, affiliated natural gas transmission companies.

Charles J. McNerney, secretary of Michigan Wisconsin, and W. Arthur Batten, secretary of American Louisiana, were elected vice presidents of their respective companies. Robert M. Hoffer, vice president and controller of both companies, was elected financial vice president of the two pipeline companies.

Mr. McNerney, a native of Detroit and graduate of the Detroit College of Law, became an assistant secretary of Michigan Wisconsin in 1950 and secretary in 1958.

A graduate of the University of Michigan law school in 1939, Mr. Batten was a partner in the Detroit law firm of Dyer, Angell, Meek and Batten until 1953, when he became an attorney for the Columbia Gas System in New York City. He joined American Louisiana in 1958 as secretary.

Mr. Hoffer, a CPA, holds a master's degree in business administration from the University of Michigan. Prior to joining the pipeline companies as controller in 1957, he was a partner in the public accounting firm of Arthur Andersen & Co. He was elected vice president and controller in 1959.

Betz joins A. G. A.

JOSEPH N. BETZ has been named manager of the A. G. A. Gold Star Appliance Program.

In his new position, Mr. Betz will coordinate a program begun about two years ago to promote top-of-the-line gas ranges. Established by A. G. A. as a buyer's guide to quality, the program is one of the largest undertakings of the gas industry. Expenditures for the national and local promotion and advertising program supporting it are estimated to be \$25 million annually.

Mr. Betz was formerly general sales manager at Pennsylvania Gas and Water Company. He began his career in the gas industry with The Manufacturers Light and Heat Company, a subsidiary of the Columbia Gas System. At Manufacturers he progressed through positions as industrial engineer, district sales manager and dealer promotion manager.

Mr. Betz is a graduate of the Carnegie Institute of Technology. He succeeds Leonard M. Hammer, who resigned from A. G. A. to accept a position as sales promotion manager with the Hardwick Stove Company.

W. M. Elmer elected president of INGAA



W. M. Elmer

W M. ELMER, president of Texas Gas Transmission Corporation, has been elected president of the Independent Natural Gas Association of America. He succeeds W. E. Mueller, president of Colorado Interstate Gas Company.

Formerly first vice president of the association, Elmer was elected to his new position at the annual meeting held in Houston, Texas, September 17-19.

Other officers elected were Orville S. Carpenter, first vice president, and George P. Garver,

second vice president. New directors chosen were Mills Cox, W. K. Sanders and W. J. Bowen.

Mr. Elmer, president of Texas Gas Transmission Corporation since 1957, has been associated with Texas Gas and its predecessors since 1947.

He is also chairman of the board of Texas Gas Exploration Corporation.

A leader in industry affairs for many years, the new INGAA president has served as a director, second vice president of INGAA and as chairman of several of its committees. He is a director of the American Gas Association, the Texas Mid-Continent Oil and Gas Association, the National Association of Manufacturers and a member of the American Petroleum Institute.

Oklahoma Natural Gas advances Ingram



C. C. Ingram

C C. INGRAM has advanced from vice president of Oklahoma Natural Gas Company's land and geological department to executive vice president of the company. This position has been vacant since December, 1955, when H. A. Eddins advanced from executive vice president to president.

Jack B. Eley, who is presently superintendent of Oklahoma Natural's land and geological department, will succeed Mr. Ingram as vice president of the land and geological department.

Mr. Ingram joined the company immediately after his graduation from the University of Oklahoma in June, 1940. He has been with the company since that time except for service in the U.S. Army during World War II from October, 1941, until 1946, when he was discharged with the rank of Major.

Mr. Ingram is a member of the Society of Petroleum Engineers and the Engineers Club of Tulsa.

Mr. Eley joined the company upon graduation in June, 1940, from the University of Oklahoma. He has been with the company since that time, having worked in Oklahoma City and Tulsa as a scout and geologist prior to 1952. He was chief geologist until 1955, when he was promoted to superintendent of the land and geological department.

Gas pipeline takes to the air



Aluminum pipe for new United Fuel Gas Company pipeline through the Appalachian Mountains is delivered to welding stations by helicopter. UGF pipeliners joined 40-foot lengths at one point on a mountain top and then dragged the entire length down one grade and up another to a second site.

Landis retires, Underhill promoted at Central Hudson



G. H. Underhill



G. H. Landis

GEORGE H. UNDERHILL has been appointed vice president, engineering of Central Hudson Gas & Electric Corporation. Mr. Underhill, Central Hudson's deputy chief engineer since 1949, succeeds George H. Landis, who retired October 1, after 39 years of company service.

Mr. Underhill joined Central Hudson in 1920 as a junior electrical engineer, after graduation from Pratt Institute and a brief period of employment with the former New York Edison Company. He became superintendent of electric distribution in 1932, and was named assistant to the chief engineer two years later. While serving as deputy chief engineer, he also acted as manager of the

engineering department's planning division from 1955 until early 1961.

A licensed professional engineer, Mr. Underhill was recently named a Fellow of the American Institute of Electrical Engineers "... for contributions to the development of common neutral primary distribution aerial cable systems."

He is the inventor of a patented multiplex telemetering system.

Mr. Landis has been the company's engineering vice president since 1954, and served as chief engineer for seven years before that. He began his Central Hudson career in 1922 as a transmission engineer, and rose successively to construction superintendent, district operating manager, planning engineer, superintendent of transmission, and manager of electric distribution.

Among the many major engineering achievements realized during his seven years as vice president were construction of 52-mile and 16-mile natural gas transmission lines; installation of a high-voltage electric transmission line under the Hudson River; and construction of a large addition to the company's general offices.

Mr. Landis is a licensed professional engineer; a Fellow of the American Institute of Electrical Engineers; member, Tau Beta Pi, national honorary engineering society.

Rosenkrans retires from The Gas Service Company

FLOYD M. ROSENKRANS, general sales manager and last member of the original executive staff of The Gas Service Company, Kansas City, Mo., has retired.

Mr. Rosenkrans began his gas industry career more than 48 years ago. He graduated from the University of Wisconsin and became a cadet with the Cities Service Company.

Mr. Rosenkrans progressed through positions with the Southern Ontario Gas Company, the Pueblo Gas and Fuel Company and the Republic Light, Heat & Power Company.

In 1925, he joined B. C. Adams, Harry Warner, Judge R. D. Garver, Harry D. Hancock, T. J. Strickler and J. L. Parker in establishing The Gas Service Company in Kansas City and became general sales manager.

Mr. Rosenkrans has been chairman of the A. G. A. Residential Gas Section and of the Midwest Regional Gas Sales Council Conference.

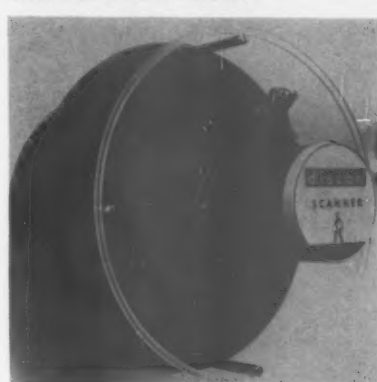
His most recent activity with A. G. A. has been as a member of the newly formed Refrigeration Task Force Committee.

LILCO office judged 'best industrial building'



Long Island Lighting Company's office building at its Hicksville operating headquarters was awarded the grand prize as the industrial building judged best in Nassau and Suffolk Counties in a recent Long Island Association contest to pick the finest industrial buildings on the island

Scanner 'reads' meters



MacLeod Instrument Corporation's new photoelectric scanner unit can "read" gauges and meters without physical connection to the instrument itself

Siegler appoints Whaling

JACK WHALING has been appointed vice president in charge of sales for the Holly-General division of the Siegler Corporation.

Mr. Whaling started at the Holly-General division in 1960 and was southern California divisional sales manager.

In his new position, Mr. Whaling will be responsible for sales of Holly-General products in the United States, Canada and Mexico.

Rheem promotes Price

LYTTLETON PRICE JR. has been promoted to vice president-research and development of Rheem Manufacturing Company's home products group, Chicago.

Mr. Price joined Rheem in 1940 as plant superintendent at South Gate, Calif., and held various positions in product development until his appointment in 1954 as manager of research and development for the home products group.

Transco names Henderson

JAMES B. HENDERSON has been named executive vice president of Transcontinental Gas Pipe Line Corporation.

Mr. Henderson, for 12 years Transco's vice president and general counsel, had been elected to the board of directors March 6, 1961, but continued to serve as an officer. Now he will also occupy the dual role of both director and executive vice president.

Transco has had no executive vice president since April 16, 1957, when E. Clyde McGraw, then executive vice president, became president.

Mr. Henderson, before joining the Transco staff 12 years ago, was an attorney for the Arkansas Natural group of companies in Shreveport, La. He has been prominent in natural gas industry circles for 15 years.



J. B. Henderson

Koch vice president at Texas Gas Transmission



R. O. Koch

ROBERT O. KOCH has been named vice president and general counsel of Texas Gas Transmission Corporation.

Formerly home office counsel for Tidewater Oil Company at Los Angeles, Calif., Mr. Koch was to assume his new post with Texas Gas November 1, 1961.

Mr. Koch, a native of Seguin, Texas, is a 1939 graduate of the University of Texas where he received his law and business administration degrees. Follow-

ing graduation from college, he entered private practice in Seguin.

From 1943 until 1948, Mr. Koch was assistant attorney general for the State of Texas, where his responsibilities included anti-trust, oil, natural gas and taxation matters.

He joined Tidewater Oil Company in 1948 as an assistant to the southern division attorney in Houston, and in 1954 was named division attorney in Houston.

In 1959, he was named attorney for the expanded southern division which included all states except the five far west states. In 1960, Mr. Koch was appointed home office counsel. He was responsible for the firm's various law divisions and was a member of Tidewater Oil Company president's council.

Gall named executive director of INGAA

LAWRENCE H. GALL has been named executive director of the Independent Natural Gas Association of America.

Mr. Gall has been acting executive director since May 1, 1961. He succeeds John A. Ferguson, who retired and is currently serving as a consultant to the board of directors.

Associated with the natural gas industry since 1946, Mr. Gall has been director of research and counsel of INGAA since 1953 and in the last few years has served as general counsel. Prior to that time he was a

partner in the law firm of Disney and Gall, which served as counsel for INGAA.

Mr. Gall is a graduate of the University of South Carolina, where he received his Bachelor of Arts and Bachelor of Law degrees, and is a member of the Federal Power Bar Association, the District of Columbia Bar Association and the American Bar Association. He is currently chairman of the Legislative Subcommittee of the Natural Gas Committee, Mineral and Natural Resources Law Section of the American Bar Association.

Pennsylvania sets up oil and gas commission

GOVERNOR DAVID L. LAWRENCE of Pennsylvania has named a six-man Oil and Gas Conservation Commission whose objective will be "the expansion of Pennsylvania's production potential in a way that will take full advantage of the state's vast untapped reserves."

In addition to Lewis E. Evans, secretary of mines and mineral industries, the membership on the commission includes: W. Floyd Clinger, six-year term, representing independent oil; Thomas G. Johnson, two-year term, representing major oil; William E. Snee, six-year term, representing independent gas;

Charles P. Duncan, Jr., two-year term, representing major utility gas; James R. Wylie, four-year term, representing major non-utility gas, and Harold J. Magner, four-year term, representing independent (oil or gas).

Mr. Snee, a producer with the firm of Snee and Eberly of Uniontown, was a pioneer in acidizing oil and gas wells and holds one of the basic patents covering the use of hydrofluoric acid in well stimulation.

Mr. Duncan has been associated for the past 12½ years with Manufacturers Light and Heat Company of Pittsburgh in geology and production.

Names in the news—a roundup of promotions and appointments

UTILITY

At the Mystic Valley Gas Company, a subsidiary of the New England Electric System, Anthony J. DiGiovanni has been appointed distribution engineer; Hermann Laudani has been named general superintendent; Carl P. Martinello became assistant production superintendent, and Richard H. Morrison has been appointed superintendent of production.

Wilson E. Wood has been named general superintendent of the Wachusett Gas Company in the New England system.

William R. Wilson, engineer with the South Jersey Gas Company, has retired after 35 years of service and Stanley M. Frasier has been promoted to supervisor of maps and records.

Jay M. Whitney, a leaser for the Ohio Fuel Gas Company, has retired.

Hugh C. Sutherland, secretary and credit

manager of the Great Falls Gas Company, has retired.

Pennsylvania Gas and Water Company has named Frank J. Petrosky, manager, residential sales, and Frank V. Bennett, manager, industrial and commercial sales.

Wallace E. Hertel has been elected to the new post of assistant vice president for engineering at The Berkshire Gas Company.

Henry W. Ziethen has been named assistant vice president at The Peoples Gas Light and Coke Company.

MANUFACTURER

The Welsbach Corporation has named Francis W. Werring as new division manager for its Baltimore division. He succeeds George Bender, who recently retired after 55 years of service. Charles D. Fell moved up to division sales manager.

API appoints Ikard

FRANK N. IKARD has been named to the newly created position of executive vice president of the American Petroleum Institute.

Born in Henrietta, Texas, Mr. Ikard received his Bachelor of Arts and Law degrees from the University of Texas. He served from 1937 to 1948 as a practicing attorney in Wichita Falls, with time out for service in World War II.

He served as a judge in the 30th Judicial District Court of Texas from 1948 to 1951 before winning a Democratic primary fight for election to Congress. He has run unopposed in five elections since then.

Cwiek joins Robertshaw

BETTY CWIEK has joined Robertshaw-Fulton's Robertshaw thermostat division as director of home economics.

Miss Cwiek succeeds Mrs. Shirley Pemberton, who recently resigned.

The new Robertshaw home economist studied at Seton Hill College in Greensburg, Pa., and served a dietetic internship at Duke University Hospital. Before joining Robertshaw-Fulton, she was a home economics consultant for the Manufacturers Light and Heat Company in Pittsburgh. Previously she had been associated with Industrial Foods in Pittsburgh, with Morrison Food Service, Inc., of Mobile, Ala., and with the McKeesport, Pa., Hospital.

Zinder names Grandall

KENNETH GRANDALL has been appointed chief petroleum engineer of H. Zinder & Associates, Inc.

Mr. Grandall has been an independent oil and gas consultant for the past five years. During the past 20 years, his work has covered oil and gas fields in Canada, Mexico and Peru, as well as many areas of the United States.

Prior to his work as an independent, he was senior engineer with an oil and gas consulting firm in Houston.

W. Roderic Bliss has been named assistant director of research at Selas Corporation of America.

A. V. Gentry has been appointed manager of the Lubbock, Texas, branch of the J. P. Ashcraft Company.

Grove Valve and Regulator Company, a subsidiary of the Walworth Company, has appointed three new sales engineers. They are George H. Loeffler, M. L. Wheat and Robert C. Hensley.

Karlyn Vaughan has joined Robertshaw-Fulton's Robertshaw Thermostat Division as an assistant on the home economics staff.

OTHER

Thomas A. Fearnside and Dr. Arthur J. Good have been elected to the board of directors of Stone & Webster Engineering Corporation.

Jenkins promoted



C. H. Jenkins

CARL H. JENKINS has been promoted to general sales manager of The Gas Service Company. He will succeed Floyd M. Rosenkrans who retires after 48 years of service.

Mr. Jenkins joined the company 33 years ago in Carthage, Mo. He worked in Aurora, Mo., was superintendent, then manager of the Monett, Mo., division, manager of the Joplin division and manager of the Topeka division before being transferred to the company's general offices in Kansas City, Mo., last year.

Gussie O. Jones retires

GUSSIE OGLESBY JONES, advertising manager, Atlanta Gas Light Company, has retired.

A native of Elberton, Georgia, and a graduate of Anderson College in South Carolina, Miss Jones has served as vice president and director of Atlanta Advertising Club, is the only woman to have served as chairman of the Domestic Advertising Committee of the American Gas Association and has been recognized for other contributions to this organization and to the Public Utilities Advertising Association.

Miss Jones is also the first woman ever to receive the award of the Atlanta Advertising Club for "Distinguished Service in the Field of Advertising." She is listed in *Who's Who of American Women*.



1961

NOVEMBER

- 27-29 •A. G. A. Accounting Section Electronics Seminar, Sheraton-Cleveland Hotel, Cleveland, Ohio

DECEMBER

- 3-7 •National Association of Home Builders Convention, Chicago, Ill.
4-5 •Florida Natural Gas Association, Annual Sales Conference, Sarasota, Fla.

FEBRUARY

- 12-15 •12th Exposition of the Air Conditioning, Heating and Refrigeration Industry, Great Western Exhibit Center, Los Angeles, Calif.
14-16 •Home Service Workshop, Milwaukee Inn, Milwaukee, Wis.

MARCH

- 4-6 •Institute of Appliance Manufacturers, Annual Convention, Netherland Hilton Hotel, Cincinnati, Ohio
26-28 •General Management Section, Annual Conference, Denver-Hilton Hotel, Denver, Colo.

APRIL

- 2-4 •National Conference of Electric and Gas Utilities Accountants, Bellevue Stratford, Philadelphia, Pa.
2-5 •A. G. A. Operating Section, Distribution Conference, San Francisco, Calif.
9-11 •Mid-West Gas Association, Annual Meeting, Hotel Radisson, Minneapolis, Minn.
10-12 •A. G. A. Sales Conference on Industrial and Commercial Gas, Shoreham Hotel, Washington, D. C.
17-19 •Southwestern Gas Measurement Short Course, University of Oklahoma, North Campus, Norman, Okla.
23-25 •GAMA Annual Meeting, The Greenbrier, White Sulphur Springs, W. Va.

OBITUARY

Harold S. Rand

manager of employee relations and insurance for The United Gas Improvement Company, Philadelphia, died suddenly October 8, in Culpepper, Virginia.

He was returning by auto from the American Gas Association Convention in Dallas, Texas, and was fatally stricken with a heart attack.

Mr. Rand had been in the employ of U.G.I. since 1937, having started as an accountant in the Philadelphia office. Later he was transferred to the Harrisburg Gas Company, now the Harrisburg Gas Division of U.G.I., and had become accounting manager in Harrisburg in 1952. In 1954 he was transferred to the headquarters office of U.G.I. in Philadelphia as manager of employee relations and insurance.

Mr. Rand had been active in the American Gas Association, Pennsylvania Gas Association and Pennsylvania Electric Association. He served as chairman of committees in all three associations.

A. A. Folsom

president of the Folsom Company, Inc., of Dallas, Texas, died August 14.

As president of the Folsom Company, a firm founded by his father, Mr. Folsom was active in the Gas Furnace and Direct Heating Equipment division of GAMA. He was a lifetime resident of Dallas and attended the University of Texas and Southern Methodist University before assuming the direction of the Folsom Company. He also was a director of the Fair Park National Bank of Dallas.

He is survived by his wife, Mrs. Betty Jane Folsom; a daughter, Miss Gay Folsom; a son, Arthur A. Folsom Jr.; his mother, Mrs. Al Folsom, and a sister, Mrs. Nelson Johnson.

Eleanor Morrison

home service director for Michigan Consolidated Gas Company's Grand Rapids district, drowned September 17, while swimming in Lake Michigan.

Miss Morrison was active in A. G. A., having served as chairman of the Home Service Committee and as a member of the Educational Service Committee. She joined Michigan Consolidated in 1945 after service with Red Cross overseas during World War II.

Miss Morrison graduated from Simpson College at Indianola, Iowa, in 1923, and came to Grand Rapids in 1927 as a home economics teacher. In 1940 she received her master's degree from Cornell University and became supervisor of home economics for the Grand Rapids school system.

Among her many honors were Grand Rapids Advertising Woman of the Year, the *McCall's* Magazine Award for work in domestic education and president of the Michigan Home Economics Association.

Elaine Knowles Weaver

professor of household equipment, school of home economics, Ohio State University, died September 26.

Dr. Weaver contributed generously of her time and counsel over the years in aiding the American Home Laundry Manufacturers' Association in its educational activities. She was a frequent speaker at the annual Home Laundry Conference of the association.

Recently the AHLMA established a fund in Dr. Weaver's honor to make financial contributions to worthy research or study in the field of home laundering.

Franklin H. Reynolds

recently retired Maytag regional manager at Allentown, Pa., died September 30.

Headquartered in Allentown for the 11 years prior to his retirement in September, Mr. Reynolds had been associated with The Maytag Company for 25 years. Joining the laundry appliance firm in July, 1936, he served as regional manager in Maine and New Hampshire until his transfer to the Pennsylvania territory.

Personnel service

Lillian Friedman, Editor

SERVICES OFFERED

Management—25 years' experience in gas utilities; most recent, 10 years in management and utility commission. Have experience in engineering and operations of transmission and distribution systems; also customer, public and employee relations, customer service and sales. 2035.

Expert Owning-Operating Cost Analysis—author of 1961 ASHRAE paper, "Integrated Load Technique for Estimating Annual Energy Use of Central Air Conditioning Plants," available on consulting basis for economic determinations of alternative designs of central air conditioning refrigeration plants. 2036.

Geologist—four years' experience gas reserve estimates; five years' surface, subsurface and wellsite geology; two years' diamond core drilling. Desires position with variety and responsibility utilizing above experience in Great Lakes or Appalachian area. Age 35, family. 2037.

Plant-Distribution-Sales Utilization—experience natural, LPG, manufactured gases. Age 48. Free to travel or locate. Good reference. No employment connection at present. 2038.

Manager—15 years' experience in natural gas operation-promotion-sales-utilization. Desires association with utility at division or local management level. Has been in complete charge of the following: merchandising sales; local building activities; all phases of operation and maintenance; public and employee relations; field and general office accounting affairs; domestic, commercial, industrial utilization. Excellent references. Will relocate. Complete resume upon request. Salary open. 2039.

Executive—seeks greater opportunity than present position affords. Seven years in electric and gas utility operations, five years army service World War II, 10 years as electric and gas consultant to management with national management consulting firm, three years with major natural gas transmission company. B.S. Mechanical Engineering (1935); Master of Business Administration (Banking and Finance, 1955); registered professional engineer. All inquiries acknowledged. 2040.

Public Relations-Advertising-Business Development—15 years' experience. Executive assistant to chairman of the board (director of public relations, advertising, business development, personnel, editor of house organ, market research). Former news correspondent for leading wire service. Top newspaper, radio, television and advertising contact. College background. Will consider position as an assistant. Seeking opportunity with future. Salary open. Not a member of reserve. 2041.

Management, Distribution Operations—11 years' managerial experience. Complete charge of medium-size properties. Proficient in merchandising, distribution and transmission design, operations, maintenance, construction, utilization, service training and office administration. Age 34. Resume upon request. 2042.

Engineering or Legal with Management Opportunity—engineer with 4½ years' experience—three with major oil company in drilling and producing oil and gas wells and 1½ in underground construction. Will receive law degree in February, 1962. Resume on request. 2043.

Director of Public Relations, Sales Promotion, Advertising—seven years' experience with major advertising agency and 15 years with consulting business, serving consumer and trade field. Age 45. Permanent full-time connection desired. 2044.

Gas Engineer and Commercial Pilot—B.S. in petroleum and natural gas engineering. Experienced in design, installation and operation of gas distribution system. Foreign employment considered. Resume on request. 2045.

Controller—10 years' experience in utility field, including three as vice president. Nine years in public accounting. Can be used profitably in company requiring strength in areas of budgetary control, long-range planning and special study work relating thereto. 2046.

Special Service Representative—nine years' experience in contacting and supplying gas equipment and information to equipment editors of national magazines, food company laboratories, photographers, TV advertising and producing companies, advertising agencies, national food companies and colleges, and gas companies throughout the country. Seventeen years with utility as general foreman of service department, supervising 14 servicemen in servicing domestic and com-

mercial equipment. Married; one child. Salary open. Willing to relocate. Available immediately. 2047.

Public Relations and Promotional—B.A. graduate University of Rochester. Experience in real estate advertising, sales and as administrative assistant. Seeking association with challenging opportunity and growth potential. Free to travel; will relocate. Complete resume on request. 2048.

Corporate Counsel—over 18 years' broad, diversified experience with large company engaged in multistate operations. Harvard Law graduate, admitted to practice in New York, Ohio, U. S. Supreme Court and other federal courts. Seeks new association with expanding organization. 2049.

Mechanical Engineer—recent graduate from University of Michigan with M.S. and M.E. degrees. Excellent scholastic record. Solid background for highly skilled technical work involving design, development and research. Proven success in leadership and organizing abilities. Age 24. Permanent employment desirable. 2050.

POSITIONS OPEN

Manager of Maintenance and Repair—to take charge of maintenance and repair division of major manufacturer serving the gas, chemical, petroleum and petrochemical industries. Requires graduate engineer with responsible contract maintenance experience who possesses the ability to negotiate contracts and build division. Salary \$15,000-\$20,000, plus incentives. 0985.

Development Engineer—to guide design of new line of gas-fired furnaces for residential. Prefer graduate engineer with design experience in furnaces, burners and heat exchangers. Opportunity for engineer in a newly organized section. Location, Western New York State. Send short resume. 0986.

Engineer, Gas Distribution—graduate engineer with experience in gas distribution field; duties in engineer design and layout of gas distribution facilities with a northern Illinois utility. Write, state age, experience and salary expected. 0987.

Statistician—experienced in statistical analysis, depreciation studies. Qualified to testify before regulatory agencies. Masters degree in mathematics and knowledge of accounting desirable. Position offers permanence with wide opportunity for personal development and advancement with a rapidly growing gas and electric utility in the New York metropolitan area. Send complete resume, including salary requirements. 0988.

Design Engineer—old-line mid-western designer, manufacturer and marketer of domestic and commercial gas ranges seeks young design engineer. BSME or EE required. At least two years' experience with mechanical or electro-mechanical company. Base salary in the \$10,000 range. 0989.

Combination Fitters and Gas Appliance Servicemen—five men required. High school graduates, ages 25 to 40. Minimum of six years' servicing experience on all types of gas appliances and air conditioning equipment. Hourly rate \$3.10 plus liberal fringes. If you qualify, telephone collect Frank Keller or John Bolender, care North Shore Gas Co., Waukegan, Ill. 0990.

Gas Measurement Supervisor—Eastern natural gas company has an opening for an individual experienced in testing, operating, maintaining and installing equipment used in measuring and controlling the flow of gas, regulating gas pressures and determining gas quality. Must have the ability to interpret gas flow diagrams, circuit drawings and blueprints. Should be able to adequately supervise and represent the company in contacts with customers. Send resume of experience, qualifications and salary requirements. 0991.

Engineer, Compression—natural gas utility in New England needs an individual to perform engineering work in connection with the construction, operation and maintenance of compressor stations. BSME or BSEE required with some experience in compressor station work. Permanent position with wide opportunity for advancement. Send resume, including salary requirements. 0992.

Superintendent and Manager—for New England gas property, pipeline propane-air distribution and bottlegas. Send resume with past experience and salary requirement. 0993.

A. G. A. advisory council

E. J. BOOTHBY.....	Washington, D. C.
F. D. CAMPBELL.....	Cambridge, Mass.
O. S. CARPENTER.....	Houston, Texas
C. E. CLOUD.....	Monroe, Mich.
SHELDON COLEMAN.....	Wichita, Kan.
C. V. COONS.....	New York, N. Y.
STUART COOPER.....	Wilmington, Del.
R. E. CRAWFORD.....	Minneapolis, Minn.
L. J. FRETWELL.....	Tulsa, Okla.
H. L. FRUECHTENICHT.....	Jackson, Mich.
R. E. GINNA.....	Rochester, N. Y.
ELISHA GRAY II.....	St. Joseph, Mich.
G. C. GRISWOLD.....	Brooklyn, N. Y.
C. H. GUEFFROY.....	Portland, Ore.
HALL M. HENRY.....	Cambridge, Mass.
H. HANSELL HILLIER.....	Savannah, Ga.
ROBERT A. HORNBY.....	San Francisco, Calif.
R. H. JOHNSON.....	Brooklyn, N. Y.
JULIUS KLEIN.....	Wyncote, Pa.
WISTER H. LIGON.....	Nashville, Tenn.
DONALD C. LUCE.....	Newark, N. J.
CHESTER L. MAY.....	Dallas, Texas
J. J. MCKEARN.....	St. Louis, Mo.
S. H. NICHOLS.....	New York, N. Y.
R. W. OTTO.....	St. Louis, Mo.
E. A. NORMAN.....	Columbus, Ohio
ED PARKES.....	Shreveport, La.
JOHN C. PARROTT.....	Roanoke, Va.
J. C. PETERSON.....	Pittsburgh, Pa.
C. P. RATHER.....	Birmingham, Ala.
N. R. SUTHERLAND.....	San Francisco, Calif.
E. H. TOLLEFSON.....	New York, N. Y.
G. F. WATERS.....	Syracuse, N. Y.
S. D. WHITEMAN.....	Hastings, Neb.
J. THEODORE WOLFE.....	Baltimore, Md.
D. K. YORATH.....	Edmonton, Alta., Canada

PAR COMMITTEE

Chairman—Richard A. Puryear, Alabama Gas Corp., Birmingham, Ala.

General Promotional Planning Committee
Chairman—Ronald A. Maloney, The Bridgeport Gas Co., Bridgeport, Conn.

General Research Planning Committee
Chairman—Charles B. Gamble, Jr., Alabama Gas Corp., Birmingham, Ala.

General Public Information Planning Committee
Chairman—Kenneth Fellows, Houston Natural Gas Corp., Houston, Texas

FINANCE COMMITTEE

Chairman—James Comerford, Consolidated Natural Gas Co., New York, N. Y.

LABORATORIES MANAGING COMMITTEE

Chairman—Lester T. Potter, Lone Star Gas Co., Dallas, Texas

APPROVAL REQUIREMENTS COMMITTEE

Chairman—R. I. Snyder, Southern California Gas Co., Los Angeles, Calif.

Associated organizations

CANADIAN GAS ASSOCIATION

Pres.—Oakah L. Jones, The Consumers' Gas Co., Toronto, Ontario
 Man. Dir.—W. H. Dalton, 55 Scarsdale Rd., Don Mills, Ontario

GAS APPLIANCE MANUFACTURERS ASSOCIATION

Pres.—W. G. Hamilton, Jr., American Meter Co. Inc., Philadelphia, Pa.
 Man. Dir.—Harold Massey, 60 East 42nd St., New York, N. Y.

EASTERN GAS SALES COUNCIL

Chmn.—Frank R. Barnitz, The Brooklyn Union Gas Co., Brooklyn, N. Y.
 Sec.—Robert N. Laux, A. G. A.

FLORIDA NATURAL GAS ASSOCIATION

Pres.—A. H. Gaede, Florida Home Gas Co., De Land, Fla.
 Sec.—K. B. Shawhan, Florida Home Gas Co., De Land, Fla.

GAS AND PETROLEUM ASSOCIATION OF ONTARIO

Pres.—J. W. Ostler, Canadian Meter Co., Ltd., Milton, Ontario
 Sec.—J. W. Bessey, 55 Scarsdale Rd., Don Mills, Ontario

INDEPENDENT NATURAL GAS ASSOCIATION OF AMERICA

Pres.—W. M. Elmer, Texas Gas Transmission Corp., Owensboro, Ky.
 Actg. Exec. Dir.—Lawrence H. Gall, 918-16th St., N.W., Washington 6, D. C.

INDIANA GAS ASSOCIATION

Pres.—George R. Woehler, Southern Indiana Gas & Electric Co., Evansville, Ind.
 Sec.-Tr.—R. A. Steele, Citizens Gas & Coke Utility, 2020 N. Meridian St., Indianapolis, Ind.

MARYLAND-DISTRICT OF COLUMBIA UTILITIES ASSOCIATION

Pres.—William S. Moore, Eastern Shore Public Service Co., Salisbury, Md.
 Sec.—Robert C. Carder, 55 East Washington St., Hagerstown, Md.

MICHIGAN GAS ASSOCIATION

Pres.—Frank B. Adams, Consumers Power Co., Jackson, Mich.
 Sec.-Tr.—M. G. Kendrick, Michigan Consolidated Gas Co., Detroit, Mich.

MID-WEST GAS ASSOCIATION

Pres.—C. J. Math, Iowa-Illinois Gas & Electric Co., Davenport, Iowa
 Sec.-Tr.—James J. Finnegan, 1163 Northwestern Bank Bldg., Minneapolis, Minn.

MID-WEST REGIONAL GAS SALES COUNCIL

Chmn.—Stan M. Johnson, Minnesota Valley Natural Gas Co., St. Peter, Minn.
 Sec.—Paul Inskeep, A. G. A.

NEW ENGLAND GAS ASSOCIATION

Pres.—Harold L. Dalbeck, Gas Companies of New England Electric System, Malden, Mass.
 Man. Dir.—Clark Belden, 10 Newbury St., Boston, Mass.

NEW JERSEY GAS ASSOCIATION

Pres.—Hugh L. Wathen, South Jersey Gas Co., Atlantic City, N. J.
 Sec.-Tr.—Ralph E. Martin, New Jersey Natural Gas Co., Asbury Park, N. J.

PACIFIC COAST GAS ASSOCIATION

Pres.—Wm. J. Bailey, Day & Night Manufacturing Co., La Puente, Calif.
 Man. Dir.—Robert D. Scott, 870 Market St., San Francisco, Calif.

PENNSYLVANIA GAS ASSOCIATION

Pres.—John E. Geesey, York County Gas Co., York, Pa.
 Sec.—H. F. Dimmler, Philadelphia Electric Co., Philadelphia, Pa.

PENNSYLVANIA NATURAL GAS MEN'S ASSOCIATION

Pres.—John T. Galey, Pittsburgh, Pa.
 Sec.-Tr.—P. L. Kessel, Carnegie Natural Gas Co., Pittsburgh, Pa.

ROCKY MOUNTAIN GAS ASSOCIATION

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